

A Work Project, presented as part of the requirements for the Award of a Master's degree in Finance
from the Nova School of Business and Economics.

NETFLIX IN EASTERN AND ASIAN REGIONS

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ABSTRACT

EQUITY RESEARCH NETFLIX

Netflix is a media subscription services provider and production corporation headquartered in Los Gatos, California. North America remains its largest and most highly penetrated market to date, whilst the international markets accounted for roughly 90% of the company's overall growth since the beginning of 2017. As the streaming video on demand industry is ushering in a new era of intensifying competition in 2020, the streaming provider invests significantly into its exclusive content, licensed and produced. The purpose of this paper is to provide a detailed analysis of Netflix and an estimation of the company's enterprise value as of December 2020.

Keywords: Streaming Video on Demand, Content Investment, Subscriber, Average Revenue per User

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Netflix: Streaming Wars

Who Will Win Streaming Wars?

- North America remains Netflix largest and most highly penetrated market to date, whilst the international markets accounted for roughly 90% of the company's overall growth in the Q1 2017 to Q3 2019 period. We project that by 2024 the company will reach 83,4 million domestic and 204 million international subscribers with EMEA becoming its largest subscriber base.
- Netflix is currently facing a growing competition from major new players in the industry, which will remove some of the licensed content from the platform. Thus, the company expanded its content expenditure to \$15 billion for 2019 to produce more exclusive content. It will likely continue increasing the budget until 2024. A higher up-front investment for the production relative to licensing is an important factor behind the growing expenditures, however, we argue that it is more profitable on the long-term.
- The streaming rivals could potentially affect the Netflix subscribers' growth or put a competitive pricing pressure on the company. As its perceived value for expenditure remains the highest in the industry, we believe the new competition will not have a significant impact on the streaming giant in terms of the subscribers as well as the prices.
- Based on a discounted cash flow valuation, the Netflix price target for the FY20 equals \$359,66. As of December 31st 2019, The closing stock price for Netflix was \$323,57, indicating it is trading at discount of 11,15%. Thus, the final recommendation is to BUY.

Company description

Netflix is a media subscription services provider and production corporation headquartered in Los Gatos, California. It operates on a subscription-based model in three reportable segments: domestic streaming, international streaming and domestic DVD.

Recommendation: BUY

Price Target FY20: 359.66 \$

Price (as of 31-Dec-19) 323.57 \$

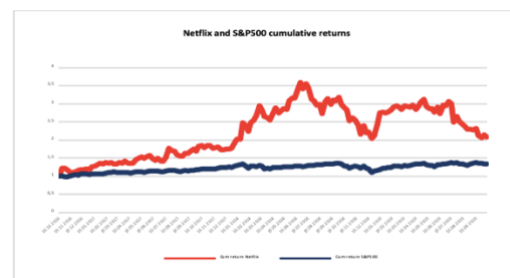
Reuters: NFLX.OQ, Bloomberg: NFLX US

52-week range (\$) 230,37 - 385,75

Market Cap (\$ bn) 141.787

Outstanding Shares (m) 438.250

Source: Bloomberg



Source: Bloomberg

(Values in \$ millions)	2018	2019E	2020F
Revenues	15794	20023	23598
Revenue growth	35%	27%	28%
Operating income	1605	1875	1854
Operating margin	10%	9%	8%
Net income	1501	1873	2500
ROIC	19%	13%	10%
Growth rate	56,7%	36,9%	27,3%
Subscribers	141,9	168	197,6
Net debt	7153	8778	12815
Amortization	7573	9174	11214

Source: Bloomberg, 2019

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Company Overview

Company Description

Netflix is a media subscription services provider and production corporation headquartered in Los Gatos, California. The company was incorporated in 1997 as a DVD-rental-by-mail business, but it has gone through a whirlwind of changes ever since. In 2007, Netflix launched its streaming platform in the US as a pioneer in Over-the-Top market, enabling its members to instantly watch TV shows and movies over the internet. Four years later, the company offered its streaming services through Latin America and the Caribbean and further internationally expanded to more than 130 countries in 2016. (Netflix, 2019) (Figure 1) Nowadays, the streaming giant is the world's leading internet entertainment service provider with more than 160 million subscribers in over 190 countries enjoying a large library of movies and TV shows across a wide variety of genres and languages. It offers 2nd run licensed titles as well as original content. Additionally, over two million members in the US still subscribed to the company's legacy DVD-by-mail service in 2019. (Netflix, 2019)

Business Model

Netflix operates on a subscription-based model in three reportable segments: domestic streaming, international streaming and domestic DVD. Subscribers pay in advance of the start of their monthly membership to access streaming content or to get DVDs delivered to them. The company offers three different plans for streaming users based on the streaming quality of the content provided and number of screens it can be streamed concurrently – basic (standard definition, single screen), standard (high definition, two screens) and premium (ultra-high definition, four screens). (Figure 2) Netflix has miscellaneous price strategies for its subscription varying across different countries. Pricing on the US plans ranged from \$8,99 to \$15,99 per month in 2019 and as of December 2018, from the US dollar equivalent of roughly \$3 to \$20 per month internationally. (Netflix, 2018) Similar operating model is adopted for the DVD renting service, where the monthly membership fees depend on the number of Disc out-at-a-time and Discs definition. As of December 2019, prices for this service started at \$7,99 per month and went up to \$14,99 per month. (Netflix, 2019) The DVD rental and streaming membership plans are two different services and cannot be clubbed as one.



Figure 1. Netflix Timeline
 Source: Netflix Website, 2019

Basic	Watch on 1 screen at a time in Standard Definition. Download videos on 1 phone or tablet.	\$8,99
Standard	Watch on 2 screens at a time. HD available. Download videos on 2 phones or tablets.	\$12.99
Premium	Watch on 4 screens at a time. HD and Ultra HD available. Download videos on 4 phones or tablets.	\$15.99

Figure 2. US Netflix Streaming Plans
 Source: Netflix Website, 2019

Company Analysis

Revenues Value Drivers

Domestic number of subscribers

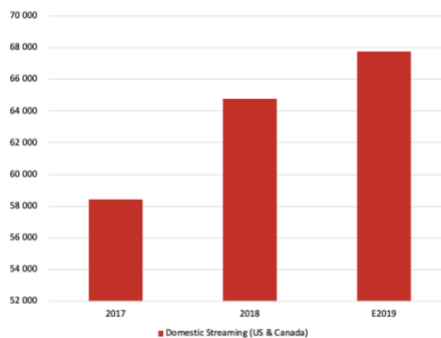


Figure 3. Domestic Netflix Subscribers 2017 – 2019
 Source: Netflix Annual Report, 2018

International number of subscribers

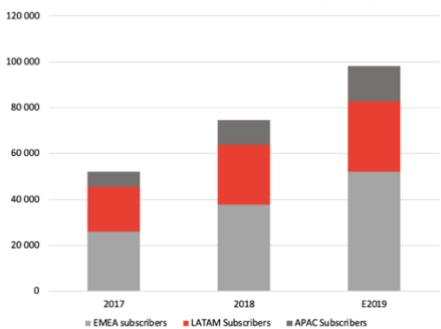


Figure 4. International Netflix Subscribers 2017 – 2019
 Source: Netflix SEC Report, 2019

Number of DVD subscribers

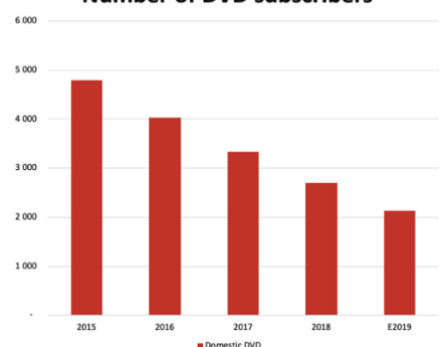


Figure 5. Netflix DVD Subscribers 2015 – 2019
 Source: Netflix Annual Report, 2018

Number of Subscribers

North America remains Netflix largest and most highly penetrated market. The number of domestic streaming subscribers increased at a rapid pace since the introduction of streaming platform, reaching 64,8 million subscribers in 2018. In the second quarter of 2019, the company lost its domestic users for the first time in eight years, dropping by 132.000 paid memberships. (Netflix, 2018) This could mark the streaming giant's peak subscriber point in North America, which is a natural result of high penetration. However, the company still net added roughly 3 million users in its largest market in 2019, combining a total of estimated 67,8 million domestic subscribers.¹ (Figure 3)

Meanwhile Netflix subscriber growth may be slowing in North America, the international markets accounted for roughly 90% of the company's overall growth in the period between Q1 2017 and Q3 2019, the latest available official data. Europe, Middle East and Africa (EMEA) subscribers increased by 140% during the respective period to 47,4 million memberships, while the Latin American (LATAM) figure nearly doubled to 29,4 million. Asia-Pacific (APAC) is a smaller but faster-growing market, rising from 4,7 million in Q1 2017 to 14,5 million paid membership in Q3 2019. Overall, the company net added roughly 24,4 million international subscribers in 2019, aggregating estimated 98,9 million international members. (Netflix, 2018) (Figure 4)

As for the DVD segment, estimated 2,1 million users still subscribed to the service in 2019. However, the figure has been decreasing year-over-year since its peak in 2010 of about 20 million US subscribers. (D'Onfro, 2019) This represents an annual compound decrease rate of 22,15% to this date. (Figure 5)

Average Revenue per User (ARPU)

An average monthly revenue per paying domestic membership was \$12,36 in the first three quarters of 2019, an inflation adjusted growth of 8,5% from the previous year. In 2018, an annual real growth rate of the domestic ARPU was slightly higher at 9,8%.² (Netflix, 2019) (Figure 6)

¹ Total numbers for 2019 in this report were estimated based on first 3 reported quarters of 2019.

² For the real growth calculations, the following inflation rates were used: 2,1% in 2017, 1,9% in 2018, 2,1% in 2019

Netflix average revenue per user in 2017 – 2019Q3			
	2017	2018	2019
US & Canada	\$9,97	\$11,16	\$12,35
EMEA	\$9,12	\$10,47	\$10,4
LATAM	\$8,05	\$8,23	\$8,63
APAC	\$9,07	\$9,35	\$9,29
DVD	\$10,17	\$10,19	\$10,15

Figure 6. Netflix Average Revenue per User in 2017 – 2019Q3
 Source: Netflix SEC Report, 2019

On Netflix international markets, the weighted average monthly revenue per user was \$9,44 in the first three quarters of 2019, in comparison to \$9,52 in 2018 and \$8,70 in 2017. EMEA has consistently had the highest ARPU among the company's international regions, reported at \$10,40 in Q3 2019. In Asia Pacific the respective number was \$9,29, followed by Latin America with the lowest revenue per subscriber of \$8,63. (Netflix, 2019) However, the ARPU in international regions has fluctuated quarter over quarter, suggesting constant currency exchange rate changes and less aggressive pricing relative to the domestic market. (Figure 6)

As for the DVD segment, an average monthly revenue per paying membership has had a negative real growth over the past years. In 2019, the respective revenue was estimated to \$10,15, an inflation adjusted decrease of 2,4% from the previous year. On average, the annual real growth of DVDs ARPU was negative 2,3% in the period between 2015 and 2018. (Netflix, 2019) (Figure 6)

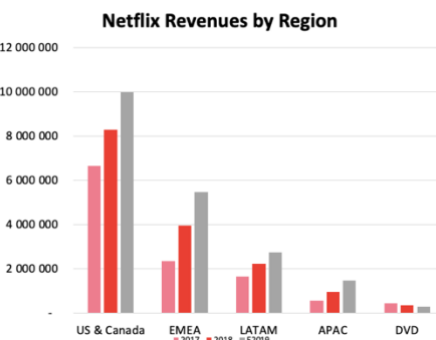


Figure 7. Netflix Revenues per Region in 2017 - 2019
 Source: Netflix SEC Report, 2019

Consolidated Revenue

Netflix reported an annual consolidated revenue of \$15,8 billion in 2018, a 32,6% real growth from the previous year. With the highest average revenue per user, the streaming within North America contributed the majority of revenues (52,4%). Among the company's international markets, the highest revenues growth was observed within EMEA, which increased by an inflation adjusted rate of 64,6% to about \$4 billion. LATAM revenues were roughly \$2,2 billion in 2018, followed by \$945,8 million generated in APAC markets. (Netflix, 2019) (Figure 7)

In 2019, the total revenues were estimated to \$20 billion. North America streaming segment still contributed about 50% of the revenues, while the respective international streaming share increased to 48,6%. In EMEA the revenues were estimated to \$5,5 billion, followed by \$2,7 billion in LATAM and \$1,5 billion in APAC. The DVDs service generated roughly \$294 million revenues in 2019, a 20,6% inflation adjusted decrease from 2018. (Netflix, 2019) (Figure 7)

Profitability



Figure 8. Netflix Profitability Ratios
 Source: Netflix Annual Report, 2018

Netflix operating margin has been increasing year-over-year, from 4% in 2016 to estimated 9% in 2019, suggesting an improved profitability of the company. Its net profit margin indicates the same, growing from 3% in 2016 to an estimated 8% in 2019. However, the gross margin of roughly 30% of total revenues, compared to the entertainment industry average of over 90%, suggests that the company has invested a significant amount into its content and the corresponding cost of revenues is therefore notably increasing relative to the revenues. (CSI Market, 2019) (Figure 8)

Content Strategy

Investment in Content

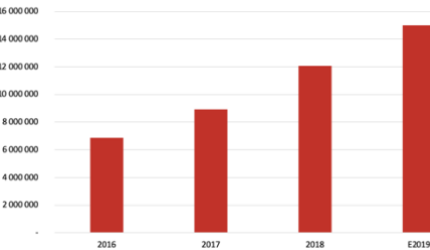


Figure 9. Netflix Investment into Content 2016 - 2019

Source: Netflix Website, 2019

Most Popular Movies and Tv-Shows on Netflix
(in millions)

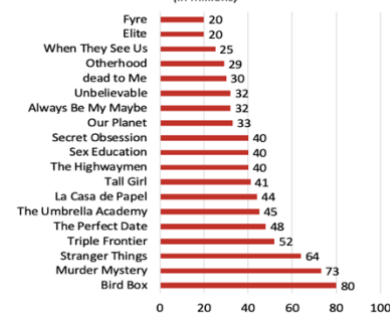


Figure 10. The Most Popular Shows and Movies on Netflix in 2019

Source: IrishTimes, 2019

The Most Popular Original Streaming Shows
(in millions)

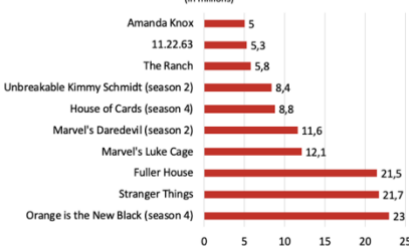


Figure 11. The Most Popular Original Streaming Shows in 2016

Source: Statista, 2017

Importance of original content to Netflix users in the U.S. 2018

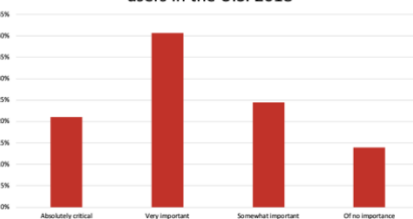


Figure 12. Importance of Original Content to Netflix users in the U.S. 2018

Source: Statista, 2018

Netflix offers to its subscribers two types of streaming content – licensed and produced. It licenses 2nd run titles as well as Netflix originals, which are licensed exclusively to the streaming giant, such as “House of Cards” and “Narcos”. In 2016, Netflix also started with the self-production of original content, owning the underlying intellectual property of movies and TV shows produced, including “Bird Box” and “Stranger Things”. (Netflix, 2019)

The company spent roughly \$15 billion on the content in 2019, its largest annual budget to date. (Smith, 2019) (Figure 9) Aligned with its strategy to move increasingly to original programming, approximately 85% of the expenditure has been earmarked for originals. (Spangler, 2018) Although the licenses remained the majority of content in 2019, the produced assets increased from \$2,9 billion in December 2017 to \$6,6 billion in March 2019. (Netflix, 2019) The inauguration of Netflix’s first European Production Hub in May 2019 and the announcement of the US Production Hub in New Mexico suggest that the production activities will continue growing.

A higher up-front investment for the production relative to licensing is an important factor behind the company's increasing expenditures. However, in-house content could potentially be less expensive in the long term. Owning the underlying intellectual property opens up the possibility for future licensing revenue streams and it provides greater rights flexibility. (Netflix, 2019) It also benefits from lower costs due to an absence of studio middle-men, whose markup ranged between 30% and 50% on Netflix original shows. (Fox Business, 2018) Thus, we believe that the increasing production will lead the company to a more profitable future than licensing.

Moreover, Netflix has been to date successful in creating its own content as regards to viewership. The most watched titles released in the period between October 2018 and September 2019 were “Bird Box” with 80 million views in its first month of availability, followed by “Murder Mystery” with 73 million and “Stranger Things Season 3” with 64 million views. (Kobliin, 2019) (Figure 10) Those numbers were significantly lower only two years prior, indicating that the increasing content spend attracts more viewers. The most popular original streaming TV show in 2016 – “Orange is the New Black Season 4” – gained 23 million views in the first month of its release, followed by “Stranger Things” with 21,7 million and “Fuller House” with 21,5 million views. (Statista, 2017) (Figure 11)

As of March 2019, roughly 40% of US consumers believed Netflix has the best original content among OTT services. (Schomer, 2019) Besides, fully 62% of US

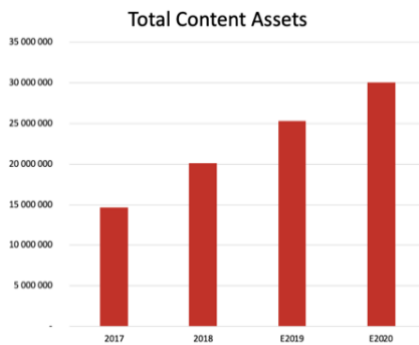


Figure 13. Total Content Assets 2017 - 2020
 Source: Netflix Annual Report, 2018

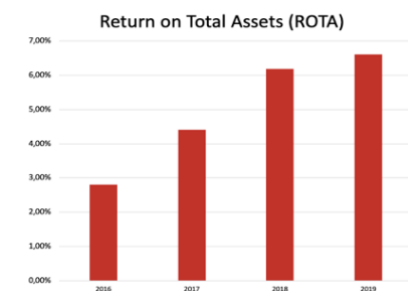


Figure 14. Return on Total Assets 2016 - 2019
 Source: Netflix Annual Report, 2019

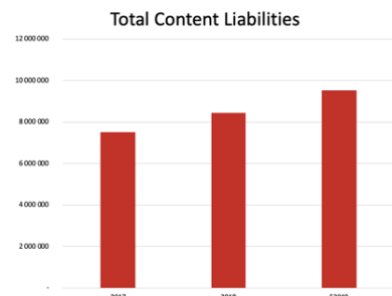


Figure 15. Total Content Liabilities
 Source: Netflix Annual Report, 2018

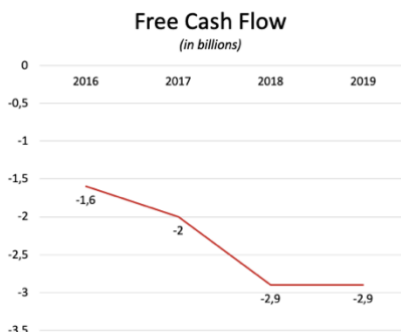


Figure 16. Free Cash Flow 2016 - 2019
 Source: Netflix Annual Report, 2018

Netflix subscribers considered original shows absolutely critical (21%) or very important (41%) in their decision to keep using the platform. (Watson, 2018) (Figure 12) Focusing on international markets with several high profile commitments for production of local original programming, we expect the company to follow the same path of success globally. In 2019, Spanish “La Casa de Papel Season 3” became the most watched show across the company’s non-English language territories with 44 million views in the first month of release. Sintonia, the latest Brazilian original, was the second most watched inaugural season in Brazil in 2019. (Netflix, 2019)

Assets and Liabilities

Total costs of titles are recorded in the balance sheet as content assets. The company capitalizes the fee per title for licenses, while it capitalizes costs associated with the production, including development costs, direct costs and production overhead for the self-produced content. (Netflix, 2019) The content assets have been increasing year-over-year, from \$14,7 billion in 2017 to estimated \$25,4 billion in 2019. (Figure 13) Over the past four years, the content assets have represented approximately 77% of total assets, which were estimated to \$28,6 billion in 2019. The return on total assets ratio has increased from 2,8% in 2016 to estimated 6,6% in 2019, indicating increasing effectiveness of the investments conversion into net income. (Figure 14)

Once a title becomes available, a corresponding content liability is also recorded in the amount of the total unpaid cost of titles. Consistently with the content assets, the content liabilities have been increasing year-over-year. The respective liabilities grew from \$7,5 billion in 2017 to estimated \$9,5 billion in 2019. (Figure 15) meanwhile the total liabilities increased from \$15,4 billion in 2017 to estimated \$24,2 billion in 2019. Total liabilities to total assets ratio was on average 80% in the 2016 to 2019 period, indicating that the majority of assets was financed through debt.

Capital Structure

The company's free cash flows continued to be negative in 2019 due to the increasing investments in original content. The figure was estimated to - \$2,9 billion in 2019, compared to - \$2,9 billion in 2018 and - \$2 billion in 2017. (Figure 16) Netflix has mostly funded its content acquisition and production by issuing junk bonds roughly every six months, putting its long-term debt at about \$12,5 billion in 2019. This is a significant increasing since 2017, when the long-term debt was \$6,5 billion. (Spangler, 2019) (Figure 17) Net debt to market capitalization ratio has

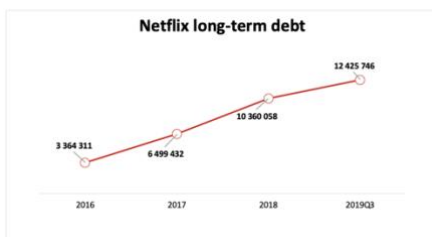


Figure 17. Netflix Long-Term Debt 2016 - 2019

Source: Netflix Annual Report, 2018

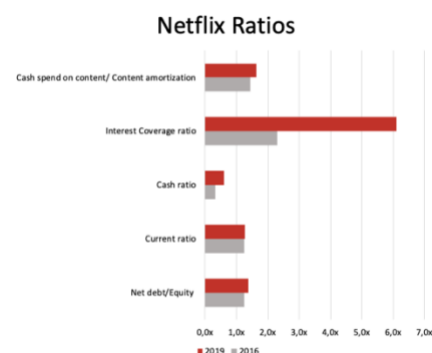


Figure 18. Netflix Ratios

Source: Netflix Annual Report, 2018

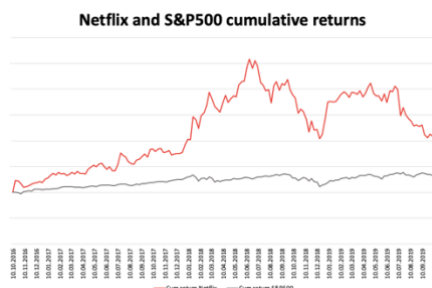


Figure 19. Netflix Cumulative Returns

Source: Bloomberg, 2019

changed accordingly – from 0,04 in 2017 to 0,07 in 2019, meanwhile the average ratio of entertainment industry is 0,03. (CSI Market, 2019)

However, increasing debt should not be alarming to investors as the company continues to yield improving results. Netflix current ratio has been increasing year-over-year, from 1,2 in 2016 to estimated 1,3 in 2019, suggesting the growing company's ability to cover its short-term liabilities. The cash ratio, a liquidity metric of the capacity to pay off short-term liabilities with cash or cash-equivalents, has also improved from 0,32 in 2016 to estimated 0,61 in 2019. Besides, the interest coverage ratio, which grew from 2,3 in 2017 to estimated 6,1 in 2019, indicates Netflix increasing ability to meet its interest payments. (Figure 18)

The return on equity increased from 8,55% in 2016 to estimated 23,64% in 2019, compared to the average ROE of 13% in the entertainment industry, suggesting increasing Netflix profitability in relation to its equity. This growth has occurred even though the return on invested capital is estimated to decrease to 13% in 2019 from 17% in 2017, indicating that the return on equity would have likely been lower without the significant amount of debt in the company's capital structure. (Yahoo Finance, 2019)

Stock Performance

Netflix common stock is traded on the NASDAQ Global Select Market under the symbol "NFLX". The company initiated an initial public offering (IPO) in May 2002, selling 5,5 million shares of common stock at the offering price of \$15 per share and closing its first day of trading at \$1,20 per present-day share after adjusting for stock splits. (Yahoo Finance, 2019) From thenceforth the stock price has increased significantly and it has continued to be volatile. As of December 15th 2019, the company had a 52-week high record of \$385,99 and low record of \$231,23 per share. Comparing the performance of the company's common stock to the S&P500 index over the last three years, Netflix shows significantly higher cumulative returns. (Figure 19)

With 438,25 million shares outstanding, the company's earnings per share for the twelve months ending September 30th 2019 was \$3,13, a 12,19% increase year-over-year. Its price-to-earnings ratio amounted 101,39 compared to the rivals Disney's 22,30, AT&T's 17,28 and CBS Corporation's 5,29. (Yahoo Finance, 2019) This indicates that the market anticipates significantly higher earnings growth of Netflix relative to its competitors. Amid the rapid expansion and high investments in the content, the company has not paid any cash dividends and it is highly likely it will not do so in the foreseeable future.

Moreover, the company redefined its corporate governance structure in 2018 in a way that brings the board of directors closer to managers and allow an open access to all operational information to efficiently increase. (Spangler, 2018) However, the Netflix approach to governance appears to ignore proxy votes whenever legally possible. (McRitchie, 2018) In June 2019, 158.66 million shareholders voted against the increase of executive compensation plan and 158.46 million voted for it. While the margin was only 190,862 votes against, the company said the vote was non-binding. Thus, the rising compensation will continue to be fueled by stock option grants, which could, if exercised, dilute the value of existing shareholders' stakes. (Fox Business, 2019)

Industry Overview

Netflix is the leader in Over-the-Top Video (OTT) market, a segment of Entertainment and Media industry. OTT comprises from stand-alone services, which filmed entertainment content is accessed through a broadband or wireless internet connection and is viewable on computer, television, tablet, smartphone or other devices that bypass TV subscription providers. These services are split between transactional video on demand (TVOD) and subscription video on demand (SVOD), the later requiring a subscription like Netflix. To better understand the company, we have analyzed the relevant sectors as well as the trends that indirectly impact on Netflix activity such as an internet usage and cord cutting.

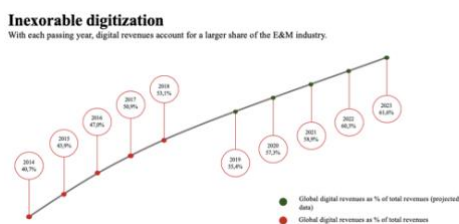


Figure 20. Share of Digital Revenues in E&M Industry
 Source: PWC Media Outlook, 2018

Media and Entertainment Industry

As devices proliferated, two key and closely related trends continue to grab headlines in the media and entertainment industry (M&E): the growth of streaming and mobile video and a shift away from traditional pay TV. Year after year, digital revenues have accounted for a larger share of the industry total revenue. By 2023, the global digital revenues will account for over 60% of the total M&E revenues compared to 50% in 2017. (Chow, 2018) (Figure 20)

Despite the shifting consumer behaviors, the industry forecasted annual growth rate will remain similar to historical trends. Over the next three years, the compound annual growth rate of total revenues in the M&E market will be 4,3%, sending an overall figure of \$2,2 trillion in 2019 to \$2,6 trillion by 2023. The US M&E industry is the largest in the world. At \$717 billion it represents a third of the global M&E industry and is expected to reach more than \$825 billion by 2023. (Chow, 2018) (Figure 21)

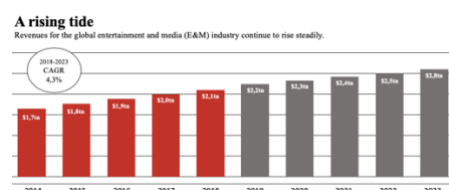


Figure 21. Revenues of Global E&M industry
 Source: PWC Media Outlook, 2018

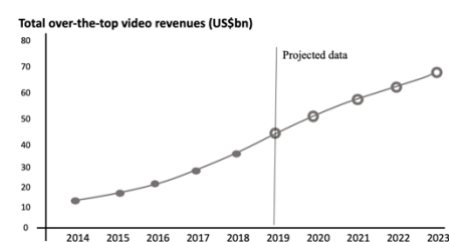


Figure 22. Total Over-the-Top Video Revenues
 Source: PWC Media Outlook, 2018

Number of OTT video service users in the U.S. 2017-2022

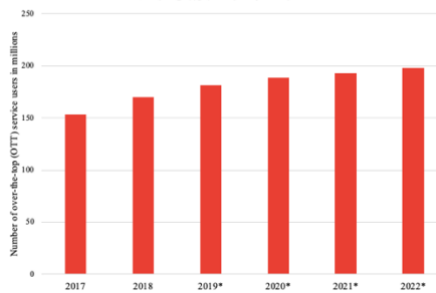


Figure 23. Number of OTT Video Service Users in the US 2017- 2022
 Source: Statista, 2019

Worldwide Revenue in SVoD segment

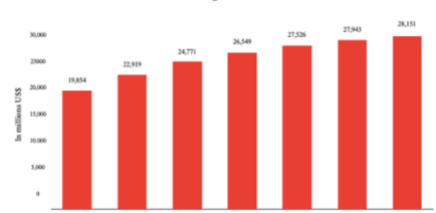


Figure 24. Worldwide Revenue in SVoD Segment 2017 - 2023
 Source: Statista, 2019

SVoD Users 2017 - 2024

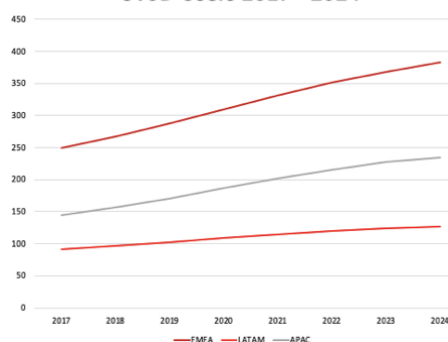


Figure 25. SVoD Users by Region 2017 - 2024
 Source: Statista, 2019

North America	\$92,35
Europe	\$34,04
Middle East	\$21,30
Latin America	\$14,06
Africa	\$9,26
Central Asia	\$11,55
East Asia	\$41,59
South Asia	\$5,08
South-East Asia	\$11,16

Figure 26. ARPU by Region in 2019
 Source: Statista, 2019

Over-the-Top Video

Over-the-Top Video (OTT) will lead a growth across media segments in the global M&E market and double its size over the next few years. Global OTT revenue will increase at CAGR 13,8% to \$72,8 billion in 2023, with its growth supported by the rising consumer appetite for video-streaming services, consumption increasing in mature markets and rapid expansion in less-developed regions. (Figure 22) In 2018, OTT video revenues were just 18,6% the size of global TV subscription revenue and the figure is projected to increase to 35,4% by 2023. (Chow, 2018)

The global OTT market has been dominated by the US with 170 million users in 2018, which is predicted to further increase to 198 million users in 2022. (Sutton, 2019) In 2018, the US claimed almost 40% of the total global revenues and the figure is expected to reach \$61 billion in 2024. (Digital TV Research, 2019) (Figure 23) Netflix viewers accounted for 87% of the total OTT video service users in the US in 2019, dominating the market along with YouTube, Amazon Prime Video and Hulu. (Sutton, 2019)

Streaming Video on Demand

A raising adoption of subscription video on demand (SVoD) will be the main driver of the OTT market growth. In 2019, SVoD had 1 billion users worldwide and reached an estimated \$24,3 billion in revenues. The number of global streaming users is projected to grow at CAGR 4% to 1,3 billion by 2024. Together with the growing annual revenue per user, the total global SVoD revenue is set to increase to \$30,4 billion in 2024. (Statista, 2019) (Figure 24)

The industry will grow at different rates across the world. While the North American market is already highly penetrated with 119,5 million users in 2019 and it is forecasted to grow at only CAGR 1,3% until 2024, Asia-Pacific subscriber base is expected to increase at CAGR 6,5%. The projection for EMEA SVoD subscribers over the respective period is CAGR 5,91%, with Africa leading the growth at CAGR 11,26% to 171,4 million African users in 2024. Lastly, SVoD market in Latin America is projected to increase at CAGR 4,2% to 104,6 million subscribers. (Statista, 2019) (Figure 25)

An average revenue per user also varies significantly across the regions. North American ARPU was roughly \$92,35 in 2019, followed by \$34,04 in Europe, \$21,30 in Middle East, \$14,06 in Latin America and \$9,26 in Africa, while in Asia ARPU ranged between \$5,08 (South Asia) to \$41,59 (East Asia). All the figures are projected to slightly increase by 2024. (Statista, 2019) (Figure 26)

DVD

Global Home Entertainment Consumer Spending (US\$ Billions)

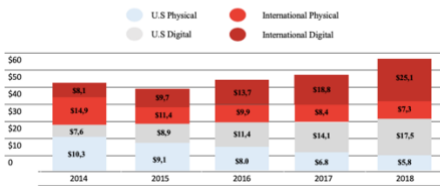


Figure 27. Global Home Entertainment Consumer Spending 2014 - 2018
 Source: IHS Markit and Digital Entertainment Group, 2019

Contrary to digital media, a sharp drop-off of physical media sales has been observed over the past years. The global sales of video disc formats, which in this context means DVD, Blu-ray, and UltraHD Blu-ray, were \$25,2 billion in 2014 and only \$13,1 billion in 2018. In the US the respective sales were \$10,3 billion in 2014 and \$5,8 billion in 2018. (Axon, 2018) The figures are expected to perpetually decrease at the similar pace to historical trends. (PWC, 2018) (Figure 27)

Internet Trends and Digital Video

Easier access to computers, higher utilization of smartphones, the modernization of countries and increasing affordability and accessibility of internet access has given people the opportunity to use internet more frequently and with more convenience. In mid-year 2019, there were 4,5 billion internet users, representing the global population penetration of 58,8%. (Internet World Stats, 2019) The figure is forecasted to increase to 6 billion internet users by 2022 and more than 7,5 billion by 2030 or 90% of the projected world population of 8,5 billion, 6 years of age and older. (Freeze, 2019) The US growth rate is significantly lower since the market is already highly penetrated, forecasting 317 million of internet users in 2023. (Statista, 2017) However, broadband internet usage is not equally present in many countries and due to infrastructure reasons, developing online markets rely strongly on mobile connections. Subsequently, global mobile data traffic is set to surpass 77 exabytes per month in 2022, up from 11,5 exabytes per month as of 2017. (Cisco, 2017) Following this mobile internet trend, Netflix already launched the lower cost, mobile-only plan in India and Malaysia in 2019. (Netflix, 2019)

Subscription TV and Cord Cutting

Another trend driving major changes across the US media landscape is the cord cutting. The number of households dropping traditional pay TV subscriptions continues to increase at a rapid pace. In 2019, nearly 21,9 million US households are expected to have given up the pay TV services. The figure is projected to reach 34,9 million in 2023, accounting for approximately 27% of all US households. (Sutton, 2019) Subscription TV revenue in the US will experience a 2,9% annual compound decrease from \$94,6 billion in 2018 to \$81,8 billion in 2023. (PWC, 2019) Video cord cutters come in all ages and are mainly driven by the high cost of multichannel TV service. However, the cord-cutting is not an international trend up to this date. (Gray, 2019)

Competitive Landscape

Streaming Wars

In 2019, some of the biggest media conglomerates launched their own streaming services in effort to remain relevant by selling movies and TV programming directly to viewers. The introduction of Disney+ and Apple TV+ in November 2019 ushered in a completely new era of streaming, one where established market leaders like Netflix, Hulu, HBO Go, and Amazon Prime Video are facing growing competition from major new players in the industry. AT&T WarnerMedia's HBO Max and Comcast's Peacock are also getting ready to enter the fray with the release dates in the spring 2020. The streaming wars could have a negative impact on Netflix's subscriber growth and its market share. (Figure 28)

PEACOCK

Comcast's new streaming service Peacock will debut in April 2020 with a slate of original programming in addition to exclusive streaming rights to popular NBC staples. The corporation has been spending heavily to reacquire streaming rights to its shows. It will pull some of its existing content from Netflix once licensing agreements expire, including two of the most watched streaming series "The Office" and "Parks and Rec". The pricing details will be announced later, but it is already known that Peacock will be supported by ads and it will additionally offer a commercial-free version at a higher price. (Adalian, 2019) However, since Comcast is the nation's largest cable operator, Peacock is expected to be available free to more than 21 million Comcast's cable subscribers in the US. In addition, Comcast and NBCUniversal are also looking to strike deals with other American pay-TV providers that would allow them to offer Peacock to their subscribers free as well.

APPLE TV+

Apple TV+ has launched in November 2019 in 100 countries. The streaming service is priced at \$4,99 a month, undercutting rival Netflix with the basic plan of \$8,99. The one-year free trial is included in every purchase of an Apple device. To better understand the scale of it, in 2018 Apple sold globally more than 217 million phone devices alone. For now, the content slate looks slim with just nine titles, but it anticipates to grow through several acquisitions. Apple has been recently spending heavily for deals with big brand names that are supposed to connote quality, including Steven Spielberg among others. The Apple's budget for new shows has reportedly increased to \$6 billion, while Netflix will shell out approximately \$15 billion solely in 2019. (Nicolaou, 2019)

Name	Prices \$	Ad-supported version
Netflix	8,99 – 15,99	NO
Peacock	Unknown	YES
Apple TV+	4,99	NO
HBO Max	14,99	YES
Prime Video	119/year	NO
Disney+	6,99	NO

Figure 28. Netflix Competitor Table
 Source: Statista, 2019

HBO MAX

Through the \$80 billion takeover of Time Warner, AT&T now controls HBO, the Warner Bros film studios, and a trove of TV channels. It plans to leverage this catalogue with the new streaming service HBO Max to increase the company's probability of winning the streaming wars. HBO Max is set to launch in May 2020 and it will offer the exclusive rights to HBO's full library, Time Warner's television classics such as "Friends" as well as new original movies. AT&T has committed to increase HBO's original productions budget by 50% to about \$1.5 billion exclusively for HBO Max. (*Sperling, 2019*) The new streaming service will have 10,000 hours of programming and it will cost \$15 a month, the same as the already existing HBO Now and \$2 more than the Netflix's most popular tier. HBO Max will start out as an ad-free, Netflix-like subscription-video service and only in 2021 introduce a tier with advertising-supported option at a lower price. Afterwards also add live programming will be added. A long-term goal for HBO Max is to help AT&T retain wireless subscriber and allow the company to pair wireless and DirecTV satellite data to learn more about consumers to charge higher rates to advertisers.

AMAZON PRIME VIDEO

Amazon Prime Video is already present on the market for 13 years and it offers an annual membership for \$119, which includes ad-free access to the full Amazon Prime Video catalog and several shopping-related benefits. (*Levenson, 2019*) It offers more than 12.000 movies and TV Shows, having much larger total library than Netflix and Hulu. However, its most recognizable Hollywood films tend to be older and plenty of the titles are mediocre with "a-la-carte" content costing extra. Amazon has been also making investments in its own original content, spending up to \$6 billion on original content in 2019, which is still \$9 billion less compared to its Netflix.

DISNEY+

Disney+ is priced at \$6,99 a month, well below the Netflix's most popular plan for \$12,99. The new streaming service includes Disney's entire library of films and TV shows. Within a year of the launch, the company plans to add 500 movies and another 2,500 TV episodes to its archives, spending \$1 billion on the original content, a figure that it expects to rise to \$2,4 billion by 2024. Disney+ expects to have 60 million to 90 million subscribers worldwide by the end of 2024. (*Berman, 2019*) Through the \$52.4 billion acquisition of 21st Century Fox, the entertainment giant also now owns Fox's movies and TV studios, which includes the "Avatar" franchise, its regional sports networks, international businesses and the 30 percent

stake in Hulu, giving Disney a majority of the streaming service. Disney+, ESPN+, and Hulu will be bundled for \$12.99.

Who Will Win Streaming Wars?

The likely outcome of streaming wars will be the acceleration of shift from pay TV to video-on-demand services and the increased consumption of the latter, creating major opportunities for all video streaming providers. As the pay TV is lagging with its catch-up services, the global SVoD industry is set to rapidly increase by 2024. However, we expect Netflix domestic market to behave differently than the international one.

In North America, there is a place for more than one streaming service in each household, considering an increasing user expenditure on streaming video and a high current average monthly cost of pay TV bill of roughly \$95. (Gray, 2019) In 2019, 70% of households in the US had a subscription to at least one streaming video service. Besides, the average US subscriber watched 3,4 services. (Vindicia, 2019) According to eMarketer, the larger part of US internet users plan to use the same number of subscription services within two years as of November 2018 and a third is planning to increase the respective figure.³ (Sutton, 2019) (Figure 29)

For the international markets, it is hard to estimate those numbers as the SVoD industry is still rapidly evolving. If the US ARPU of pay TV is used as a benchmark and the cord cutting trend as well as the varying SVoD ARPU across regions are taken into account, we come to an estimation between 1 and 2 streaming video subscription per user. We believe that in regions with a higher income and a higher penetration of SVoD services this number will be on average higher than in emerging markets. However, despite the lower number of subscriptions compared to North America, we believe there is still a place for any streaming provider as the international markets are not as highly penetrated and saturated.

In 2024, we envision the market to settle as following. Assuming that AT&T, Disney+ and Hulu meet its goals, HBO Max will reach about 80 million subscribers, with 50 million coming from the US, followed by Disney+ with the 75 million subscribers worldwide and one-third of those coming from the domestic market. (Brooks, 2019) Hulu anticipates to increase its US subscribers base to about 50 million subscribers by 2024 and has currently no plans to expand internationally. (Barnes, 2019) We estimate that Amazon Prime Video subscriber base will increase correspondingly with the SVoD industry to over 120 million users worldwide and 55 million domestically, placed second after Netflix with 288 million

Cord Cutting:
Pay TV ARPU in US compared to rest of the world (monthly)



Figure 29. Pay TV ARPU in US Compared to the Rest of the World
Source: IHS Markit, 2019

Service	Total Subscribers (in millions)	Subscribers from the US (in millions)
Disney+	75	25
HBO Max	80	50
Hulu	50	50
Prime Videos	120	55

Figure 30. Number of Subscribers of Netflix Competitors
Source: IHS Markit, 2019

Is Netflix Facing a Mass Exodus?

% of U.S. Netflix subscribers who would cancel if the following were removed

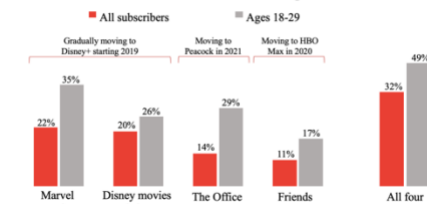


Figure 31. Percentage of Subscribers Who Would Cancel Netflix if Particular Content was Removed
Source: Statista, 2019

³ The survey didn't define subscription services, but the majority of the US consumers were interested in TV and VoD.

subscribers. The future of Peacock and Apple TV+ remains unclear due to a lack of data on its medium to long term strategy. (Figure 30)

Impact of Streaming Wars on Netflix

Netflix could lose approximately 20% of its total content library in terms of programming hours as it is owned by the rival companies participating in the streaming wars. (Ampere Analysis, 2019) Soon-to-be-removed content constitutes of more than half of the 50 most popular shows on Netflix. In 2019, WarnerMedia inked the streaming rights to “Friends”, while NBCUniversal secured the rights to “The Office” and “Parks and Recreation”, which will detach three most-watched shows from the platform in 2020 and 2021. (Molla, 2018) (Figure 31)

The content removal could negatively affect Netflix in terms of a subscriber growth. According to a survey conducted by Morning Consult and the Hollywood Reporter in 2019, 22% of the US Netflix subscribers would consider cancelling their subscription if “Marvel movies” were removed. The respective figure for “Disney movies” is 20%, “The Office” 14% and “Friends” 11%. (Shevenock, 2019)

While the library watching is indeed a part of the customer experience, we believe that with the increasing popularity of original content the streaming giant users are more likely to additionally subscribe to the rival streaming service rather than cancel Netflix subscription. The Fortune’s study suggest that only 11% of US Netflix users are likely to cancel their subscription for new streaming service and 41% are likely to additionally subscribe to Apple TV+, Disney+ or Peacock. (Lambert, 2019) Besides, the reduction of content did not influence the number of subscribers in the past despite the existing competition such as Hulu, HBO Now, CBS All Access and Amazon Prime Video. (McAlone, 2016) In fact, the streaming giant has the highest customer retention rate among its competitors. (Rieck, 2019) (Figure 32)

During its rise in the SVoD industry, Netflix has established strong brand recognition, an important advantage helping the company to remain the market leader. Netflix was in 2019 the fastest-growing brand in the US as its value grew 105% over the past year to \$21,2 billion. (Spangler, 2019) Its perceived value for expenditure remains the highest even among the new competition. (Langston, 2019) (Figure 33) Thus, we believe that the competitive pressure will not impact on Netflix prices. According to ING Economics Department, expensive subscriptions can succeed if added value is high enough. (ING, 2018) In our opinion, Netflix is on the right track to keep providing high perceived value considering it has the highest investment in the entertainment content among its rivals. (Barker, 2019) (Figure 34)

Streaming Video: One-Year U.S. Customer Retention

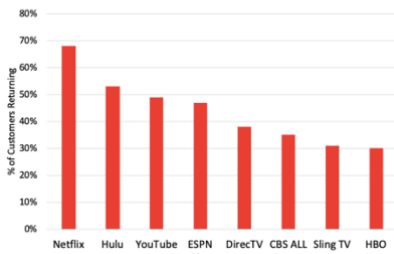


Figure 32. Customer Retention Rate in the US

Source: Second Measure, 2019

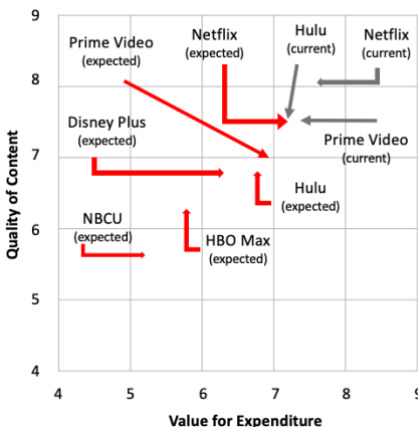


Figure 33. Current and Expected Value for Expenditure of Streaming Platforms

Source: The Langston Co, 2019

How much the companies spend on content

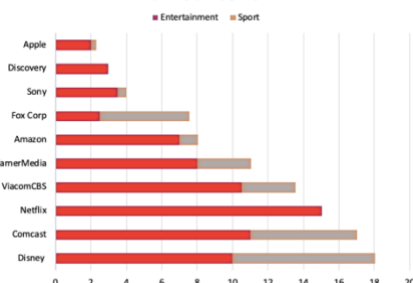


Figure 34. How Much Companies Spend on Content

Source: Financial Times, 2019

The streaming wars will assumably have less vigorous impact on the Netflix's international markets due to the current lower SVoD industry penetration and saturation compared to North America. Besides, the majority of new streaming providers is expected to have a large part of its subscriber base within the US. With the strong brand image, focus on international content and adaptation of the prices across different countries, we believe that the streaming wars will not have a significant impact on Netflix international markets in terms of its subscriber base as well as the average revenue per user.

Forecasting

Content Strategy, Assets and Liabilities Forecast

Netflix has been ramping up its content spend for several years and will likely continue to do so in a bid to hold on to its position as the market leader. In November 2019, CEO Reed Hasting said at the New York Times' DealBook conference the company was planning on "taking spending up quite a bit". (Smith, 2019) With the intensifying streaming wars, Netflix increased its content expenditure to \$15 billion for 2019 to produce more exclusive content and strengthen its foothold. On average, the inflation adjusted incremental content investment increased annually by \$2,6 billion since 2015. We expect the incremental spend to continue growing at the same pace until 2024, when the SVoD market will assumably stabilize. The content expenditure will additionally increase at the global inflation rate of 3,4% as the titles are expected to become more global rather than the US focused. (IMF, 2019) Afterwards, the content investment is expected to remain at the similar level of pre-streaming wars in 2019, increased by the respective global inflation of 3,4%. (Figure 35)

We expect the content assets to increase proportionally to the cash spent on content with the coefficient of 1,76, which was calculated based on the period of 2016 to 2018. (Figure 36) Total streaming content assets are estimated at \$48,8 billion in 2023, \$30 billion in 2024 and thenceforth increase 3,4% per annum in nominal terms. The content liabilities are forecasted to increase correspondingly to content assets with the coefficient of 0,21, which was calculated based on the period of 2016 to 2018. (Figure 37) Total content liabilities are estimated at 14,4 billion in 2023, 10,5 billion in 2024 and thenceforth increase on average 2,2% per year in nominal terms. (Figure 38)

Investment in Streaming Content Assets

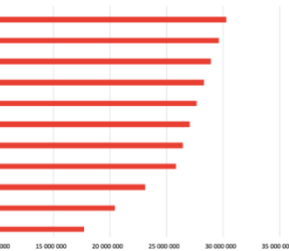


Figure 35. Projected Content Investment 2020 - 2030
 Source: Netflix Annual Report, 2018

Coefficient	1,76
Standard Error	0,025
Lower 95%	1,45
Upper 95%	2,08
R Square	0,9998
P-value	0,009

Figure 36. Content Assets Regression Output

Coefficient	0,207
Standard Error	0,025
Lower 95%	-0,109
Upper 95%	0,524
R Square	0,986
P-value	0,076

Figure 37. Content Liabilities Regression Output

Content Assets vs. Content Liabilities

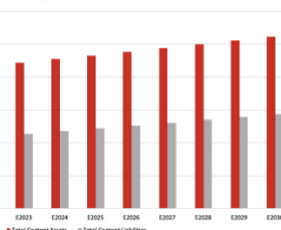


Figure 38. Projected Content Assets vs. Projected Content Liabilities, 2020 - 2030
 Source: Netflix Annual Report, 2018

Amortization of streaming content assets

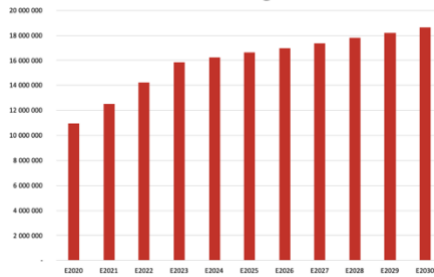


Figure 39. Projected Amortization of Streaming Content Assets 2020 - 2030
 Source: Statista, 2019

Total Costs of Revenue

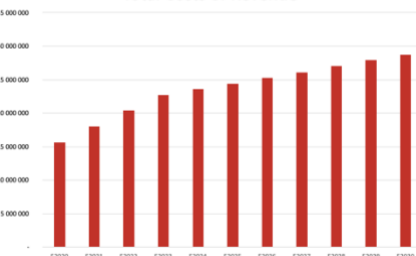


Figure 40. Projected Total Costs of Revenue 2020 - 2030
 Source: Netflix Annual Report, 2018

Marketing

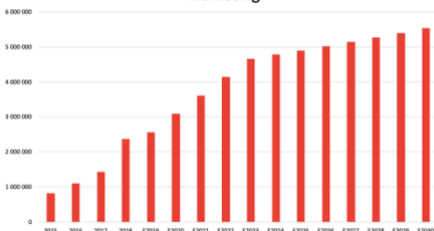


Figure 41. Projected Marketing Costs 2015 - 2030
 Source: Netflix Annual Report, 2018

Coefficient	0,194
Standard Error	0,033
Lower 95%	0,051
Upper 95%	0,337
R Square	0,944
P-value	0,028

Figure 42. Marketing Regression Output

Cost of Revenues Forecast

Amortization of streaming content assets makes up the majority of cost of revenues. Content assets are amortized on accelerated basis over the shorter of the title's window of availability or estimated period of use or 10 years. (*Netflix, 2019*) One way to monitor the amortization is the ratio of cash spend on content and content amortization, which indicates the timing differences between cash payment terms on content and the content expense recognition. The respective ratio was estimated to 1,60 in 2018, increased by 0,16 from the previous year, as cash payments are more front end loaded, especially for a produced content. There is no reason to assume any changes to this ratio in the near future since the content strategy is expected to remain the same. Thus, amortization is projected to increase to \$17,7 billion in 2023, \$11 billion in 2024 and it will stabilize afterwards, consistently with the content expenditure. (*Figure 39*)

Other costs of revenues include content personnel costs, portions of the overall deals with certain content creators, music rights, miscellaneous expenses related to production, streaming delivery expenses and other operating costs like payment processing and customer service and other costs involved in making our content available to members. (*Netflix, 2018*) Over the last three years, those costs were consistently proportionate as 20% to the total streaming revenues and are expected to change accordingly. Thus, we expect that the total streaming cost of revenues will be roughly \$24,7 billion in 2023, \$18,6 billion in 2024 and steadily increase annually on average at 4,2% thereafter. (*Figure 40*)

Marketing Forecast

The tech-centric company is known to handle most media in-house, developing its own marketing model and processing internal data on its own. The company's less traditional marketing strategy is not expected to change in the near future. As a performance marketer, Netflix will continue to develop innovative marketing strategy through a broad mix of marketing and public relation programs to reach a broader audience. We expect most of it to go to digital, especially programmatic, with the goal of improving its ability to do individualized marketing.

The marketing expenditure, which consist primarily of advertising expenses and certain payments made to the marketing partners, was over the past years aligned with the company's content strategy. In 2018, Netflix spent \$2,37 billion on marketing activities, compared to \$1,44 billion in 2017, and further boosted the annual budget to estimated \$2,57 billion in 2019. (*Figure 41*) We expect that this spend will continue increasing correspondingly to the investment in streaming

content with the coefficient of 0,19, calculated based on the period between 2016 and 2019. (Figure 42) Over the next ten years, an annual average marketing budget is forecasted at roughly \$3,7 billion.

Technology and G&A Forecast

Technology and development costs consist of payroll and related expenses for all technology personnel, as well as other costs incurred in making improvements to the service offerings, including testing, maintaining and modifying user interface. (Netflix, 2018) Since 2015 the technology and development costs have been slowly decreasing as the percentage of revenues and we expect this trend to continue due to the further economies of scale. (Figure 43) From 2023 onwards, these costs are forecasted to remain at 4,5% of revenues, which is the average technology spend in a media industry. (Deloitte, 2018)

General and administrative expenses consist of payroll and related expenses for corporate personnel, professional fees and other general corporate expenses. The costs have been on average 4% of the total revenues over the past five years (2015-2019) and there is no reason to assume this ratio will change. (Figure 45)

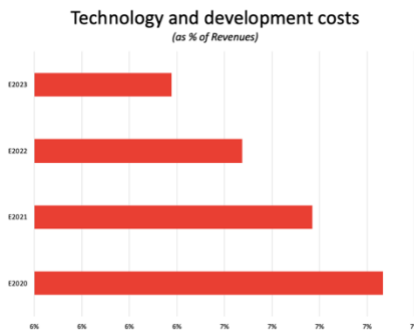


Figure 43. Projected T&D Costs 2020 - 2023

Source: Netflix Annual Report, 2018

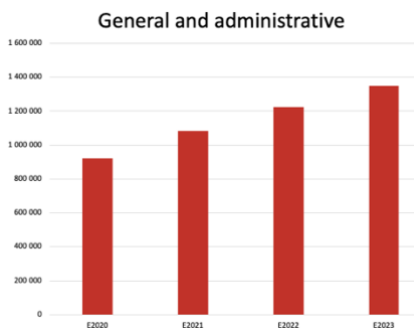


Figure 44. Projected G&A Costs 2020 - 2023

Source: Netflix Annual Report, 2018

DVD Revenues Forecast

As the overall physical media industry is declining, we anticipate that the revenues generated by the DVDs-by-mail segment will continue to decrease. However, there will likely be some persistent level of demand for DVDs, particularly in rural areas where broadband is not easily available or affordable. (Netflix, 2019) We assume that the streaming giant will go out of the DVDs business by latest in 2023. Its subscribers base is going to decline at the average annual rate of negative 19,8% in nominal terms, calculations based on the historical trends of segment. The average monthly revenue per paid membership is going to remain roughly \$10,05. Thus, the revenues are expected to decline from estimated \$0,29 billion in 2019 to \$0,12 billion in 2023. (Figure 45)

Domestic Streaming Revenues Forecast

Subscribers

We expect the number of subscribers in North America to change in the period between 2020 and 2024 correspondingly to the SVoD industry at the same pace as it did in the period between 2017 and 2019. To obtain the respective coefficient, the regression analysis was performed. Netflix total paid domestic memberships at the end of period was treated as dependent variable, meanwhile the total number of SVoD users in Canada and the US, data obtained on Statista, was taken

Domestic DVD	E2020	E2021	E2022	E2023
Revenue	229 999	204 456	158 588	120 036
% change of revenue	-21,9%	-11,1%	-22,4%	-24,3%
Total paid memberships at end of period	1666	1 281	981	745
ARPU	10,12	10,08	10,05	9,95

Figure 45. DVD Forecast

Source: Netflix Annual Report, 2018

Coefficient	1,79
Standard Error	0,407
Lower 95%	-3,38
Upper 95%	6,96
R Square	0,951
P-value	0,142126

Figure 46. Subscribers in North America Region Regression Output

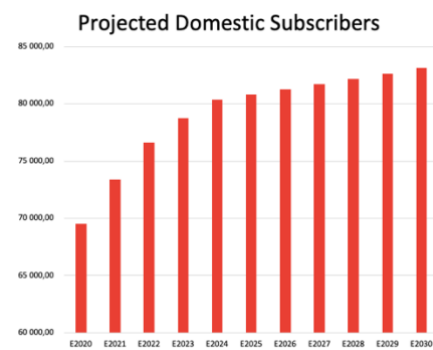


Figure 47. Projected Domestic Subscribers 2020 - 2030
Source: Netflix Annual Report, 2018

Coefficient	2,039
Standard Error	0,216
Lower 95%	-0,703
Upper 95%	4,78
R Square	0,989
P-value	0,067

Figure 48. ARPU in North America Region Regression Output

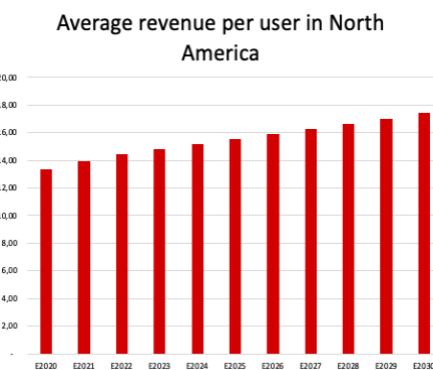


Figure 49. Projected Average Revenue per User in North America 2020 - 2030
Source: Netflix Annual Report, 2018

as an independent variable. An important remark is that the regression model lacks an adequate sample size and its P- value of 0,142 suggest that it is non-significant considering a 95% significance level. However, as the model explains 95,1% of the Netflix paid domestic subscribers' changes and we find the coefficient coherent, we proceeded with the analysis. The regression coefficient indicates that in the period between 2017 and 2019 Netflix subscriber base grew 1,79 times faster than the total SVoD industry in North America. However, the coefficient was further corrected for the forecasting purposes by negative 11%, representing the number of Netflix subscribers expected to cancel their subscriptions as a result of the streaming wars. (Figure 46)

The streaming giant's subscriber base in North America is projected to grow at CAGR 4,2% until 2024, reaching 83,4 million users. We believe that this growth will be partially driven by the termination of DVDs segment as well as the cord cutting trend. Afterwards, we anticipate the growth to slow to the region's projected population growth of 0,38% due to a high market penetration and saturation. (Worldometers, 2019) (Figure 47)

Average Revenue per User

We anticipate the revenue per user in North America to change in the period between 2020 and 2024 correspondingly to the SVoD industry at the same pace as it did in the period between 2017 and 2019. For the projection of real price growth over the next four years, we used a regression modelling. The inflation adjusted average annual revenue per paying domestic membership of Netflix was regressed against the average revenue per user in the industry in North America. An important remark is that the regression model lacks an adequate sample size and its P-value of 0,067 suggest that it is non-significant considering a 95% significance level. However, as the model explains 98,9% of the Netflix domestic ARPU changes and we find the coefficient coherent, we proceeded with the analysis. (Figure 48)

The company's ARPU in North America is projected to increase at the IMF suggested future inflation rate of 2,3% and at the SVoD ARPU with the coefficient of 2,04. (IMF, 2019) In 2024, the Netflix ARPU will increase to 15,21 and its growth will afterwards drop to the respective North American inflation rate, considering that the streaming service provider is not expected to significantly increase its annual content budget any longer and that the industry is expected to stabilize. (Figure 49)

Revenues

The total revenues of domestic streaming segment will increase to roughly \$14,7 billion in 2024. Afterwards, the annual nominal revenue growth will stabilize at 2,7% as the subscriber's growth and the real price growth will slow.

International Streaming Revenues Forecast

Subscribers⁴

	EMEA	LATAM	APAC
Coefficient	0,64	1,03	0,32
Standard Error	0,006	0,127	0,0003
Lower 95%	0,566	-0,582	0,317
Upper 95%	0,7144	2,641	0,325
R Square	0,9999	0,985	0,999
P-value	0,006	0,078	0,0006

Figure 50. Subscribers in EMEA, LATAM, APAC Regions Regression Output

We expect the number of international streaming subscribers to change in the period between 2020 and 2024 correspondingly to the SVoD industry at the same pace as it did in the period between 2017 and 2019. For the forecasting purposes, we have divided the international markets into three regions - APAC, EMEA and LATAM. To obtain the respective coefficients, the regression analysis was performed for each region. Netflix total paid memberships at the end of period was treated as the dependent variable, meanwhile the total number of SVoD users in the respective market was taken as the independent variable. An important remark is that all regression models lack an adequate sample size and their P-values suggest that EMEA and APAC models are significant, while LATAM is not significant considering a 95% significance level. Moreover, as all the models explain over 97% of the number of Netflix subscriber changes and we find the obtained coefficients coherent, we proceeded with the analysis. (Figure 50)

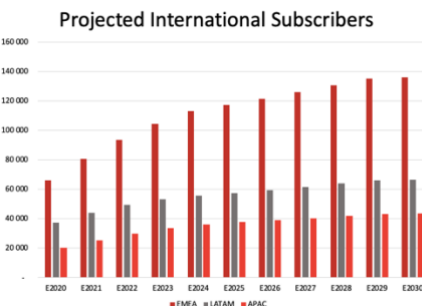


Figure 51. Projected International Subscribers by Region 2020 - 2030
 Source: Netflix Annual Report, 2018

The number of Netflix subscribers in EMEA is projected to grow at CAGR 16,8% until 2024 with the regression coefficient of 0,64. It will reach 113,1 million users in 2024, becoming the largest company's subscriber base. In the period between 2024 and 2030, we anticipate the subscriber growth to drop to the weighted average of internet penetration growth as of 2024 in Africa (8,5%) and Middle East (1,98%) as well as Europe's growth of population (-0,12%), where the internet penetration was already 87,7% in 2019. In 2030, when presumably more than 7,5 billion by will have an internet access, the growth in all regions will stabilize to the weighted average of the regions' population growth of 0,84%. (Figure 51)

LATAM subscriber base is forecasted to grow at CAGR 12,47% in the period between in 2019 and 2024 with the regression coefficient of 1,029, reaching 55,6 million subscribers in 2024. Afterwards, we anticipate the growth to drop to the average of internet penetration growth as of 2024 of 3,5% until 2029 and beyond that stabilize at the population growth of 0,32%. (Figure 51)

⁴ The internet penetration in 2019 data was obtained from Internet World Statistics, meanwhile the internet penetration growth as of 2024 was obtained from Statista. For the population growth, the numbers from Worldometers are used.

In APAC markets, the number of subscribers will increase at CAGR 19% in the period between 2019 and 2024 with the regression coefficient of 0,321, reaching roughly 36,3 million subscribers in 2024. Afterwards, we anticipate the growth to drop to the average of internet penetration growth as of 2024 of 3,6% until 2029 and afterwards to stabilize at the population growth of 0,25%. China was excluded from the projections as there are no signs of Netflix entering the market in the foreseeable future. (Figure 53)

Average Revenue per User

We expect the average revenue per user in Netflix international markets to change in the period between 2020 and 2024 correspondingly to the SVoD industry at the same pace as it did in the period between 2017 and 2019. For the projection of real price growth over the next four years, we used a regression modelling. The inflation adjusted average annual revenue per paying membership of Netflix was regressed against the average revenue per user in the respective region. An important remark is that the fluctuation of exchange rates of Netflix ARPU and a significant dispersion of industry's prices in certain region significantly reduced the accuracy of the regressions and that all the models are non-significant. However, as we find the coefficients coherent, we proceeded with the analysis.

The company's ARPU in EMEA is projected to increase at the weighted average inflation rate in Europe, Middle East and Africa of 5,2% and at the SVoD ARPU with the coefficient of -6,62. In 2024, the Netflix EMEA ARPU will increase to \$13 and will afterwards stabilize at the growth of the respective inflation rate. For the projection of LATAM ARPU, the coefficient of -14,65 and inflation rate of 3,50% was used and for APAC 5,24 and 3,40%, respectively. (Figure 52) Thus, we expect the monthly revenue per LATAM subscriber to decrease to \$7,69 in 2024, meanwhile the APAC figure will increase to \$10,95. Beyond 2024, the average monthly revenue per paying international membership is going to increase correspondingly to the regions' inflation rates. (Figure 53) The figures are calculated under assumption that the exchange rates will not change significantly in the foreseeable future. (Figure 54)

Revenues

The consolidated revenues of Netflix international streaming segment are projected at \$23,3 billion in 2024 with EMEA contributing \$14,9 billion, followed by \$4,5 billion revenues generated in LATAM and \$3,9 billion in APAC. In 2029, before the subscriber growth stabilizes in all regions at the average population growth, the revenues are set to reach \$23,2 billion in EMEA, \$6,4 billion in LATAM and \$5,6 billion in LATAM.

	EMEA	LATAM	APAC
Coefficient	-6,624	-14,65	5,24
Standard Error	22,888	4,23	21,33
Lower 95%	-297,448	-68,41	-265,83
Upper 95%	284,1998	39,11	276,32
R Square	0,077	0,923	0,06
P-value	0,821	0,179	0,847

Figure 52. ARPU in EMEA, LATAM and APAC Region Regression Output

	Inflation Rate
EMEA	5,17%
LATAM	3,50%
APAC	3,40%

Figure 53. EMEA, LATAM, APAC Inflation Rates

Source: IMF, 2019

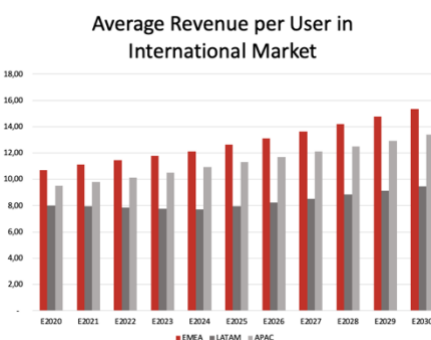


Figure 54. Projected International Average Revenue per User by Region 2020 - 2030

Source: Netflix Annual Report, 2018

cost of debt	CUS-64110LAR7	CUS-64110LAU0	CUS-64110LAU0
Credit Rating (Moody)	Ba3	Ba3	Ba3
Time to Maturity	9,384	9,888	8,888
Maturity Date	15.05.2029	15.11.2029	15.11.2028
Yield to Maturity	5,33%	4,45%	4,73%
Coupon (biannual)	6,375	5,375	5,875
Issue Price	100,00	100,00	100,00
Last Closed Price	107,88	107,50	108,41
Probability of Default	1,66%	1,58%	1,61%
Average Global Default	16,72%	16,72%	15,27%
Loss Given Default	46,10%	46,10%	46,10%
Annual defaulted Corporate Bond	54%	54%	54%
rd	4,56%	3,72%	3,99%
Cost of Debt	4,09%		
Marginal Tax Rate	21,00%		
After Tax Cost of Debt	3,23%		

Figure 55. Cost of Debt for Netflix
 Source: Moody's, 2019; Bloomberg, 2019

Valuation

Weighted Average Cost of Capital

The 4,09% cost of debt was derived from the average cost of debt of the three recently issued Netflix bonds in US dollars with the maturity date of 15th November 2028, 15th May and 15th November 2029. The calculations were based on the yield to maturity of the respective bonds, probability of default and loss given default. The cost of debt is similar to the yield of government bonds of the same Moody's rating Ba3. (Figure 55)

The 9,80% cost of equity was derived using the Capital Asset Pricing Model (CAPM). The raw beta was calculated with the regression model of the company stock returns against market portfolio S&P500 with the measurement period of three years of weekly returns. The model explains 27,7% of the changes in Netflix returns and its P-value of $2.86 \cdot 10^{-13}$ suggests that the coefficient is significant, considering 95% significance level. The raw beta of 1,61, with confidence intervals ranging between 1,21 and 2,0, indicates that the stock's movements were about 161% of the index's movements in the respective period. However, for the CAPM model the forward-looking adjusted beta of 1,4 was used, assuming that the security's beta will move toward the market average over time. (Figure 56)

The calculated weighted average cost of capital is 9,71%. The forward-looking debt-to-equity ratio used is 0,03, the average of media and entertainment industry. Although the respective ratio of Netflix is currently 0,07, we believe that with the increasing profitability and stabilizing investments into content the amount of debt is going to significantly decrease after 2024.

Coefficient	1,61
Standard Error	0,202
Lower 95%	1,21
Upper 95%	2,01
R Square	0,277
P-value	$2,86451E^{-13}$

Figure 56. CAPM Regression Output
 Source: Bloomberg, 2019

Free Cash Flows

Free cash flows will remain negative until 2024 as a result of the company's presumable content strategy. The free cash flows are projected to be on average - \$3 billion per annum in the respective period. After reaching the peak of the streaming content spend growth in 2023, the cashflows are expected to be positive thenceforth. (Figure 57)



Figure 57. Netflix Free Cash Flow 2019 - 2023
 Source: Netflix Annual Report, 2018

Growth, Reinvestment Rate and ROIC

Netflix nominal perpetual growth of 4,16% was derived from its reinvestment rate and return on invested capital (ROIC) as of 2030, when the company's growth will assumable stabilize. Netflix reinvestment rate is projected to be on average over 285% until 2024 and afterwards decrease to 6% in 2030, a result of the projected

content strategy. The return on invested capital is forecasted to be on average 8% over the next four years and it will thereafter increase year-over-year to 67% in 2030. This suggest that with the subscription business model the investment in original content, particularly in the in-house produced titles, is profitable on the long term and the company will continue providing value for its shareholders.

Scenario Analysis

As the main risk of Netflix we identify its subscribers growth. If the company's efforts to attract and retain subscribers are not successful, particularly with the new fierce competition, the business will be adversely affected. Considering that the content costs are largely fixed and contracted over several years, the company may not be able to adjust its expenditures or increase its revenues per user. Therefore, we conducted a scenario analysis of the different growth rates of streaming subscribers and its impact on Netflix enterprise value.

In the original model, the annual North American SVoD subscriber growth until 2024 is on average 1,4% and for the domestic DVDs segment -22,7%. In the international markets the growth ranges from 4,3% in LATAM region to 5,9% and 6,5% in EMEA and APAC, respectively. The share price in this scenario is \$359,6 and therefore investor decision is to BUY.

In the optimistic scenario, we assume that the annual North American SVoD subscriber growth is on average 2,5%, meanwhile the DVDs-by-mail subscribers' decrease remains the same. In international markets growth ranges from 5,4% in LATAM region to 7% and 7,6% in EMEA and APAC, respectively. The share price in this scenario is \$466,5 and therefore investor decision is to BUY.

In the pessimistic scenario, we assume that the annual North American SVoD subscriber growth is on average 0,8%, meanwhile the DVDs-by-mail subscribers' decrease remains the same. In the international markets the growth ranges from 3,7% in LATAM region to 5,3% and 5,9% in EMEA and APAC, respectively. The share price in this scenario is 298,5 and therefore investor decision is to SELL. This scenario could occur if Netflix does not perform well in Streaming wars, and would lose its subscribers to Disney or any other competitor.

Sensitivity Analysis

We have conducted sensitivity analysis for each of the 3 scenarios to examine how the discount rate and the perpetual growth rate impact on Netflix market capitalization. In the analysis', the growth rate ranges from 1% to 6%, whilst the discount rate span from 8% to 15%.

In the original model, the highest share price of \$973,7 comes as a result of 6% growth rate and 8% cost of capital, whilst a combined 1% growth and 15% discount rate lead to the lowest share price of \$184,6. The company's market capitalization as of 30th December 2019 corresponds to WACC of 10% and growth rate of 3%.

In the optimistic scenario, the sensitivity analysis results range from \$1196,7 to \$232,2 per share with the same growth and discount rate figures as in the original model. In the pessimistic scenario, the share price varies from \$835,5 to \$155. The company's market cap as of 30th December 2019 corresponds to the WACC in range of 11% and 12% and the growth rate in range of 1% to 3% in the optimistic scenario, whilst in the pessimistic scenarios those figures are 9% and 3%, respectively. Thus, we conclude that the valuation of Netflix is highly sensitive to the perpetual growth rate and the discount rate used in the valuation.

Relative Valuation

For the relative valuation, we selected companies that operate in the same industry as Netflix or share other similarities in terms of business model, including Disney, Amazon, CBS Corporation and AT&T. The comparables were analyzed based on the general company figures (market cap, last price, revenues), company multiples (EV/EBITDA, EV/EBIT, P/S, P/E and D/E) as well as financial performance and key metrics (gross margin, gross profit, WACC, ROE). There is a great dispersion between the figures of each company due to the size, main business and number of segments. For instance, the last price as of 30th December 2019 of Amazon was \$1846,9 compared to \$39,8 per AT&T share. (Figure 58.) Thus, the median of each metric was taken for the valuation to not be affected by outliers.

Netflix was valued in four different groups of multiples: EBITDA, EBIT, Price and Earnings. The final share price ranges from \$59,29 to \$117,48 per share. (Figure 59) An important remark is that this value is merely indicative, considering that all comparable companies operate in multiple business sectors and have different core businesses, which significantly reduced the accuracy of the valuation.

Stock Price and Final Recommendations

Based on the discounted cash flow valuation, Netflix market capitalization as of December 2020 is \$157,6 billion. (Figure 60) With the 438 250 million shares outstanding, this leads to the company's share price of \$359,66. The closing stock price for Netflix was \$323,57 as of December 31st 2019, indicating it is trading at discount of 11,15%. Thus, the final investors recommendation is to BUY.

GENERAL COMPANY FIGURES				
Ticker	Name	Mkt Cap (b)	Last price	Revenues (m)
NFLX US Equity	Netflix	141,69	323,3	15,794
DIS US Equity	Disney	259,13	143,77	59,434
AMZN US Equity	Amazon	915,68	1846,9	232,887
CBS US Equity	CBS Corporation	15,506	41,48	14,514
T US Equity	At&T	285	39,84	170,756

Figure 58. Netflix Competitors
Source: Bloomberg, 2019

EBITDA		EBIT	
EBITDA 2018	1 688 383	EBIT 2018	1 605 226
EV/EBITDA (Median)	20x	EV/EBIT (Median)	21x
EV/EBITDA (Lower)	7x	EV/EBIT (Lower)	14x
EV/EBITDA (Upper)	32x	EV/EBIT (Upper)	89x
+ Enterprise Value (EV)	33 462 867	Enterprise Value (EV)	33 114 216
- Net Debt	7 153 243	- Net Debt	7 153 243
= Equity Value	26 309 624	= Equity Value	25 960 973
Shares Outstanding	437 840	Shares Outstanding	437 840
Share Price	60,09	Share Price	59,29
SALES		EARNINGS	
Sales 2018	15 794 341	Earnings 2018	1 510 469
P/S (Median)	3x	P/E (Median)	24x
P/S (Lower)	1x	P/E (Lower)	14x
P/S (Upper)	7x	P/E (Upper)	104x
Equity Value	51 437 315	Equity Value	36 448 692
Shares Outstanding	437 840	Shares Outstanding	437 840
Share Price	117,48	Share Price	83,25

Figure 59. Relative Valuation
Source: Bloomberg, 2019

+ Core Enterprise Value	170 703 398
+ Total Non-Core Assets	350 308
- Total Non-Core Liabilities	- 210 449
= Enterprise Value	170 843 257
- Net Debt	- 13 220 720
= Common Equity Value	157 622 537

Figure 60. Netflix Final Valuation
Source: Bloomberg, 2019

Appendix

Financial Statements

Income statement

REFORMULATED INCOME STATEMENT & FORECASTS																
Consolidated	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Revenues	6,779,811	8,830,688	11,682,713	15,794,341	20,923,021	27,988,579	37,988,367	51,756,267	69,119,961	91,981,324	120,369,579	155,932,036	200,762,145	258,484,712	331,981,020	424,204,424
Net Revenues	4,180,339	5,077,307	6,183,026	7,646,547	9,889,871	11,130,984	12,289,510	13,262,006	14,015,221	14,687,221	15,061,585	15,466,051	15,882,407	16,309,443	16,747,962	17,198,271
Domestic DVD	645,737	342,987	450,497	365,589	294,542	229,899	204,456	188,588	120,036	-	-	-	-	-	-	-
International Streaming	1,933,435	3,211,066	5,089,191	7,782,105	9,732,588	12,304,086	15,414,400	19,380,643	23,314,103	25,304,995	27,468,488	29,919,738	32,370,268	35,103,058	37,006,133	37,006,133
Cost of Revenues	(8,981,476)	(9,837,482)	(9,833,888)	(9,987,538)	(11,428,480)	(16,108,945)	(20,989,881)	(26,869,612)	(35,641,888)	(46,641,888)	(59,383,888)	(74,347,285)	(91,347,285)	(110,347,285)	(131,347,285)	(154,347,285)
Domestic and International Streaming	(8,287,568)	(9,384,720)	(9,384,720)	(9,384,720)	(11,384,720)	(16,108,945)	(20,989,881)	(26,869,612)	(35,641,888)	(46,641,888)	(59,383,888)	(74,347,285)	(91,347,285)	(110,347,285)	(131,347,285)	(154,347,285)
Domestic DVD	(202,908)	(202,908)	(202,908)	(202,908)	(202,908)	(202,908)	(202,908)	(202,908)	(202,908)	(202,908)	(202,908)	(202,908)	(202,908)	(202,908)	(202,908)	(202,908)
Gross Margin	884,982	(1,807,176)	(4,384,281)	(2,340,991)	(1,538,509)	(5,077,961)	(9,709,371)	(13,607,606)	(25,026,667)	(31,954,667)	(44,327,913)	(59,878,254)	(74,974,878)	(94,035,242)	(114,603,323)	(137,154,053)
Domestic and International Streaming	884,982	(1,807,176)	(4,384,281)	(2,340,991)	(1,538,509)	(5,077,961)	(9,709,371)	(13,607,606)	(25,026,667)	(31,954,667)	(44,327,913)	(59,878,254)	(74,974,878)	(94,035,242)	(114,603,323)	(137,154,053)
Technology and development	(659,788)	(780,323)	(953,718)	(1,221,814)	(1,514,364)	(1,719,688)	(1,941,188)	(2,188,418)	(2,458,188)	(2,748,188)	(3,058,188)	(3,388,188)	(3,738,188)	(4,108,188)	(4,498,188)	(4,898,188)
General and administrative	(467,328)	(515,643)	(631,543)	(830,244)	(879,711)	(953,421)	(1,041,178)	(1,142,081)	(1,255,643)	(1,384,643)	(1,529,643)	(1,690,643)	(1,868,643)	(2,064,643)	(2,289,643)	(2,544,643)
Operating Income (Expense)	365,826	279,709	838,679	1,605,226	1,639,389	1,733,676	2,069,449	2,666,461	1,696,449	1,306,449	1,248,744	1,297,961	1,357,961	1,428,188	1,508,188	1,598,188
Operating Margin	5.4%	3.1%	7.1%	10.2%	7.8%	7.5%	7.6%	7.6%	4.6%	3.7%	3.3%	3.4%	3.6%	3.9%	4.2%	4.5%
Taxes	(75,423)	(115,776)	(204,907)	(384,797)	(527,071)	(775,275)	(1,051,849)	(1,422,476)	(1,811,426)	(2,211,426)	(2,624,426)	(3,051,426)	(3,498,426)	(3,965,426)	(4,452,426)	(4,959,426)
Result	229,203	163,933	633,772	1,220,429	1,112,318	1,058,401	1,017,602	1,243,985	1,485,023	1,095,023	1,024,318	1,096,535	1,160,535	1,232,762	1,305,762	1,398,762
Net Profit Margin	3.4%	1.8%	5.4%	7.7%	5.3%	3.8%	3.7%	3.7%	2.4%	1.9%	1.8%	1.9%	2.0%	2.1%	2.2%	2.3%
Non-Core	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Interest and other income (expenses)	10,629	(10,780)	40,304	(9,742)	(20,306)	(7,618)	(7,618)	(7,618)	(7,618)	(7,618)	(7,618)	(7,618)	(7,618)	(7,618)	(7,618)	(7,618)
Taxes	(88,802)	(88,802)	(88,802)	(88,802)	(88,802)	(88,802)	(88,802)	(88,802)	(88,802)	(88,802)	(88,802)	(88,802)	(88,802)	(88,802)	(88,802)	(88,802)
Result	(98,173)	(99,582)	(48,498)	(98,544)	(109,108)	(96,420)	(96,420)	(96,420)	(96,420)	(96,420)	(96,420)	(96,420)	(96,420)	(96,420)	(96,420)	(96,420)
Financial	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Interest expense	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)
Tax Shield	44,491	44,491	44,491	44,491	44,491	44,491	44,491	44,491	44,491	44,491	44,491	44,491	44,491	44,491	44,491	44,491
Result	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)
Contributable	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Revenues	6,779,811	8,830,688	11,682,713	15,794,341	20,923,021	27,988,579	37,988,367	51,756,267	69,119,961	91,981,324	120,369,579	155,932,036	200,762,145	258,484,712	331,981,020	424,204,424
Cost of Revenues	(8,981,476)	(9,837,482)	(9,833,888)	(9,987,538)	(11,428,480)	(16,108,945)	(20,989,881)	(26,869,612)	(35,641,888)	(46,641,888)	(59,383,888)	(74,347,285)	(91,347,285)	(110,347,285)	(131,347,285)	(154,347,285)
Marketing	(824,982)	(1,087,176)	(1,438,281)	(2,340,991)	(2,989,509)	(3,719,288)	(4,507,961)	(5,380,643)	(6,348,188)	(7,510,643)	(8,878,188)	(10,455,643)	(12,248,188)	(14,266,188)	(16,520,188)	(19,024,188)
Technology and development	(659,788)	(780,323)	(953,718)	(1,221,814)	(1,514,364)	(1,719,688)	(1,941,188)	(2,188,418)	(2,458,188)	(2,748,188)	(3,058,188)	(3,388,188)	(3,738,188)	(4,108,188)	(4,498,188)	(4,898,188)
General and administrative	(467,328)	(515,643)	(631,543)	(830,244)	(879,711)	(953,421)	(1,041,178)	(1,142,081)	(1,255,643)	(1,384,643)	(1,529,643)	(1,690,643)	(1,868,643)	(2,064,643)	(2,289,643)	(2,544,643)
Non-Core Result	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)	(132,714)
Financial Result	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)	(88,223)
Comprehensive Income	83,779	185,421	685,937	1,232,217	1,023,194	1,112,318	1,058,401	1,017,602	1,243,985	1,095,023	1,024,318	1,096,535	1,160,535	1,232,762	1,305,762	1,398,762

Balance sheet

REFORMULATED BALANCE SHEET & FORECASTS																
Consolidated	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Current Assets	333,942	619,133	587,088	854,941	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282
Operating Cash	478,133	587,088	854,941	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,432,282
Non-Current Assets	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Current Assets, net	333,942	619,133	587,088	854,941	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282
Current Liabilities	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Current Liabilities, net	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Total Current Assets	4,320,461	5,469,512	6,467,133	7,734,279	9,269,641	10,961,030	12,840,214	14,868,351	17,095,969	19,541,941	22,224,235	25,147,917	28,324,719	31,868,966	35,701,564	39,834,664
Non-Current Assets	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Non-Current Current Assets, net	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Property and Equipment, net	250,389	329,404	418,281	507,158	596,035	684,912	773,789	862,666	951,543	1,040,420	1,129,297	1,218,174	1,307,051	1,395,928	1,484,805	1,573,682
Total Non-Current Assets	7,359,787	8,649,027	9,821,792	11,222,424	12,889,848	14,682,987	16,671,737	18,818,303	20,972,731	23,255,925	25,756,517	28,480,199	31,434,671	34,764,938	38,505,140	42,765,046
Equity	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Current Liabilities	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Current Current Liabilities	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Accounts payable	312,942	473,041	633,140	793,239	953,338	1,113,437	1,273,536	1,433,635	1,593,734	1,753,833	1,913,932	2,074,031	2,234,130	2,394,229	2,554,328	2,714,427
Accounts receivable	172,632	315,984	459,336	602,688	746,039	889,391	1,032,743	1,176,095	1,319,447	1,462,799	1,606,151	1,749,503	1,892,855	2,036,207	2,179,559	2,322,911
Deferred Revenue	443,472	686,522	929,572	1,172,622	1,415,672	1,658,722	1,901,772	2,144,822	2,387,872	2,630,922	2,873,972	3,117,022	3,360,072	3,603,122	3,846,172	4,089,222
Total Current Liabilities	4,589,677	5,469,512	6,467,133	7,734,279	9,269,641	10,961,030	12,840,214	14,868,351	17,095,969	19,541,941	22,224,235	25,147,917	28,324,719	31,868,966	35,701,564	39,834,664
Non-Current Liabilities	2,803,572	3,329,796	3,739,326	4,211,673	4,748,247	5,275,372	5,802,507	6,329,642	6,856,777	7,383,912	7,910,047	8,436,182	8,962,317	9,488,452	10,014,587	10,540,722
Non-Current Current Liabilities	2,803,572	3,329,796	3,739,326	4,211,673	4,748,247	5,275,372	5,802,507	6,329,642	6,856,777	7,383,912	7,910,047	8,436,182	8,962,317	9,488,452	10,014,587	10,540,722
Long-Term Debt	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Invested Capital, Non-Current Business	4,884,128	7,889,053	11,639,293	16,833,261	20,541,496	25,162,222	30,937,881	38,039,148	46,573,817	55,828,959	65,823,855	76,572,455	88,199,088	100,684,930	114,259,312	129,273,518
Equity	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Current Liabilities	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Current Current Liabilities	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Accounts payable	312,942	473,041	633,140	793,239	953,338	1,113,437	1,273,536	1,433,635	1,593,734	1,753,833	1,913,932	2,074,031	2,234,130	2,394,229	2,554,328	2,714,427
Accounts receivable	172,632	315,984	459,336	602,688	746,039	889,391	1,032,743	1,176,095	1,319,447	1,462,799	1,606,151	1,749,503	1,892,855	2,036,207	2,179,559	2,322,911
Deferred Revenue	443,472	686,522	929,572	1,172,622	1,415,672	1,658,722	1,901,772	2,144,822	2,387,872	2,630,922	2,873,972	3,117,022	3,360,072	3,603,122	3,846,172	4,089,222
Total Current Liabilities	4,589,677	5,469,512	6,467,133	7,734,279	9,269,641	10,961,030	12,840,214	14,868,351	17,095,969	19,541,941	22,224,235	25,147,917	28,324,719	31,868,966	35,701,564	39,834,664
Non-Current Liabilities	2,803,572	3,329,796	3,739,326	4,211,673	4,748,247	5,275,372	5,802,507	6,329,642	6,856,777	7,383,912	7,910,047	8,436,182	8,962,317	9,488,452	10,014,587	10,540,722
Non-Current Current Liabilities	2,803,572	3,329,796	3,739,326	4,211,673	4,748,247	5,275,372	5,802,507	6,329,642	6,856,777	7,383,912	7,910,047	8,436,182	8,962,317	9,488,452	10,014,587	10,540,722
Long-Term Debt	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Invested Capital, Non-Current Business	4,884,128	7,889,053	11,639,293	16,833,261	20,541,496	25,162,222	30,937,881	38,039,148	46,573,817	55,828,959	65,823,855	76,572,455	88,199,088	100,684,930	114,259,312	129,273,518
Equity	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Current Liabilities	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Current Current Liabilities	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
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Total Current Liabilities	4,589,677	5,469,512	6,467,133	7,734,279	9,269,641	10,961,030	12,840,214	14,868,351	17,095,969	19,541,941	22,224,235	25,147,917	28,324,719	31,868,966	35,701,564	39,834,664
Non-Current Liabilities	2,803,572	3,329,796	3,739,326	4,211,673	4,748,247	5,275,372	5,802,507	6,329,642	6,856,777	7,383,912	7,910,047	8,436,182	8,962,317	9,488,452	10,014,587	10,540,722
Non-Current Current Liabilities	2,803,572	3,329,796	3,739,326	4,211,673	4,748,247	5,275,372	5,802,507	6,329,642	6,856,777	7,383,912	7,910,047	8,436,182	8,962,317	9,488,452	10,014,587	10,540,722
Long-Term Debt	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Invested Capital, Non-Current Business	4,884,128	7,889,053	11,639,293	16,833,261	20,541,496	25,162,222	30,937,881	38,039,148	46,573,817	55,828,959	65,823,855	76,572,455	88,199,088	100,684,930	114,259,312	129,273,518
Equity	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Current Liabilities	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Current Current Liabilities	1,039,326	1,180,515	1,354,659	1,488,145	1,620,207	1,721,957	1,831,523	1,949,952	2,076,762	2,213,984	2,332,282	2,432,282	2,549,952	2,676,762	2,803,572	2,930,382
Accounts payable	312,942	473,041	633,140	793,239	953,338	1,113,437	1,273,536	1,433,635	1,593,734	1,753,833	1,913,932	2,074,031	2,234,130	2,394,229	2,554,328	2,714,427
Accounts receivable	172,632	315,984	459,336	602,688	746,039	889,391	1,032,743	1,176,095	1,319,447	1,462,799	1,606,151	1,749,503	1,892,855	2,036,207	2,179,559	2,322,911
Deferred Revenue	443,472	686,522	929,572	1,172,622	1,415,672	1,658,722	1,901,772	2,144,822	2,387,872	2,630,922	2,873,972	3,117,022	3,360,072	3,603,122	3,846,172	4,089,222
Total Current Liabilities	4,589,677	5,469,512	6,467,133	7,734,279	9,269,641	10,961,030	12,840,214	14,868,351	17,095,969	19,541,941	22,224,235	25,147,917	28,324,719	31,868,966	35,701,564	39,834,664
Non-Current Liabilities	2,803,572	3,329,796	3,739,326	4,211,673	4,748,247	5,275,372	5,802,507	6,329,642	6,856,777	7,383,912</						

References

- Adalian, Josef. 2019. "NBCUniversal's Streaming Service Is Called Peacock and It's Launching Next April". Last accessed January 2. <https://www.vulture.com/2019/09/nbc-streaming-service-peacock.html>
- Alexander, Julia. 2019. "Disney Doesn't Have to Sell Anyone on Streaming." Last accessed December 19. <https://www.theverge.com/2019/11/12/20958310/disney-plus-star-wars-marvel-pixar-national-geographic-simpsons-netflix-hbo-max-peacock>.
- Ampere Analysis Insights. 2019. Last accessed December 16. <https://www.ampereanalysis.com/insights>.
- Axon, Samuel. 2019. "DVD and Blu-ray sales nearly halved over five years, MPAA report says." Last accessed December 26. <https://arstechnica.com/gadgets/2019/04/dvd-and-blu-ray-sales-nearly-halved-over-five-years-mpaa-report-says/>
- Barker, Alex, and Anna Nicolaou. 2019. "Online Streaming: Television's Looming Car Crash." Last accessed November 10. <https://www.ft.com/content/03b86b7a-014e-11ea-be59-e49b2a136b8d>.
- Barker, Alex. 2019. "Netflix Regional Numbers Reveal Challenge of Overseas Streaming." Last accessed December 16. <https://www.ft.com/content/b990d314-2030-11ea-92da-f0c92e957a96>.
- Barnes, Brooks. 2019. "Disney Is New to Streaming, but Its Marketing Is Unmatched." Last accessed October 28. <https://www.nytimes.com/2019/10/27/business/media/disney-plus-marketing.html>.
- Barnes, James. 2019. "Hulu is Expanding Internationally But Hulu Employees Are Worried About the Future Under Disney." Last accessed November 29. <https://www.cordcuttersnews.com/hulu-is-expanding-internationally-but-hulu-employees-are-worried-about-the-future-under-disney/>.
- Berman, Judy. 2019. "The Streaming Wars Are Finally in Full Swing—And the First Casualties Are Coming Into View." Last accessed December 10. <https://time.com/5736490/streaming-wars-disney-plus-apple-tv/>
- Blom, Marieke, and Ferdinand Nijboer. 2018. "Now That We Subscribe to Music, Are Tools and Toiletries next? Opportunities and Challenges for Tangible Goods Subscription." Last accessed September 29. https://www.ing.nl/media/ING_EBZ_opportunities-and-challenges-for-tangible-goods-subscriptions_tcm162-143372.pdf.
- Bloom, David. 2019. "How Netflix Is Building Its Global Reach One Acquisition At A Time". Last accessed December 10. <https://www.tubefilter.com/2019/08/02/insights-netflix-international-acquisitions-streaming-video-wars-opportunities/>.
- Broadband Technology Report. 2018. "U.S. OTT subscriptions to reach 208 million in 2023". Last accessed December 10. <https://www.broadbandtechreport.com/video/ott/article/16449081/us-ott-subscriptions-to-reach-208-million-in-2023>.
- Business insider. 2019. "NETFLIX INC.DL-NOTES 2019(19/28) Bond | Markets Insider". Last accessed December 10. https://markets.businessinsider.com/bonds/netflix_incdl-notes_201919-28-bond-2028-us64110lat35.
- Carsten. 2019. "New Study Reveals the Average Online Video Subscriber in the U.S. Subscribes to 3.4 Streaming Services and Pays an Average of \$8.53 Per Service." Last accessed December 19. <https://www.vindicia.com/company/press-releases/new-study-reveals-average-online-video-subscriber-us-subscribes-34-streaming>.
- Cisco. 2017. "Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2017–2022 White Paper." Last accessed December 19. <https://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/white-paper-c11-738429.html>.
- CMS, October. 2019. "Moody's Investors Service - Annual Default Study: Corporate Default and Recovery Rates, 1920 - 2017 (Excel Data)". Last accessed December 19. <https://app.researchpool.com/provider/moodys-investors-service/annual-default-study-corporate-default-and-recovery-rates-1920-2017>.
- CSIMarket. 2019. «Company, Sector, Industry and Market Analysis». Last accessed December 19. <https://csimarket.com/>.
- Damodaran, Aswath. 2019 "Return on Equity by Sector (US)." Last accessed January 3. http://pages.stern.nyu.edu/~adamodar/New_Home_Page/datafile/roe.html.
- Daniels, Marcos. 2019. «Digital Media Report 2019 - Video-on-Demand». Last accessed November 29. <https://fesrvsd.fe.unl.pt:2099/outlook/206/100/video-streaming--svod-/worldwide#market-arpu>.
- Deloitte. 2018. "Streaming Video Service Benefits." Last accessed December 4. <https://www.marketingcharts.com/digital/video-82941/attachment/deloitte-streaming-video-service-benefits-apr2018>

- Deloitteeditor. 2019. «IT Spending: From Value Preservation to Value Creation». The Wall Street Journal. Dow Jones & Company. Last accessed December 4. <https://deloitte.wsj.com/cio/2018/03/12/it-spending-from-value-preservation-to-value-creation/>.
- Digital TV Research. 2019. «Global OTT TV and Video Forecasts». Last accessed January 2. <https://www.digitaltvresearch.com/products/product?id=239>.
- D'Onfro, Jillian. 2018. "What It's like to Work at Netflix's Dying DVD Business." Last accessed January 2. <https://www.cnn.com/2018/01/23/netflix-dvd-business-still-alive-what-is-it-like-to-work-there.html>.
- Dubras, Ryan; Nazir, Mobbie and Underwood, Lauren. 2019. «Digital 2019: Global Internet Use Accelerates». Last accessed December 4. <https://wearesocial.com/blog/2019/01/digital-2019-global-internet-use-accelerates>.
- Feldman, Dana. 2019. «Netflix's Dominance In U.S. Wanes As Hulu, Amazon Gain Subscribers Last accessed December 11. <https://www.forbes.com/sites/danafeldman/2019/08/21/netflix-is-expected-to-lose-us-share-as-rivals-gain/#615ac7aa66d6>.
- Fool, Motley. 2018. «Look How Much Netflix Saves by Producing Its Own Originals». Last accessed December 15. <https://www.foxbusiness.com/markets/look-how-much-netflix-saves-by-producing-its-own-originals>.
- FOX Business. 2019. "Netflix Sets Salaries for CEO Hastings and Other Senior Executives." Last accessed December 2. https://www.foxbusiness.com/lifestyle/netflix-sets-salaries-for-ceo-hastings-and-other-senior-executives?cmpid=prn_investors.
- Freeze, Di. 2019. «Humans On The Internet Will Triple From 2015 To 2022 And Hit 6 Billion». Last accessed December 15. <https://cybersecurityventures.com/how-many-internet-users-will-the-world-have-in-2022-and-in-2030/>.
- Gray, Paul. 2019. "The Global TV Market." HBBTV. Last accessed November 20. https://www.hbbtv.org/wp-content/uploads/2019/11/03_The-Global-TV-Market_Gray_IHSM.pdf.
- Groenendijk, Marcel, and Herman Engelbrecht. 2019. "Equity Market Risk Premium – Research Summary." Last accessed January 2. <https://assets.kpmg/content/dam/kpmg/nl/pdf/2019/advisory/equity-market-research-summary-300619.pdf>.
- IMF. 2020. "Inflation Rate, Average Consumer Prices." Last accessed January 2. <https://www.imf.org/external/datamapper/PCPIPCH@WEO/OEMDC/ADVEC/WEOWORLD/SMQ/EUQ/APQ/AFQ/MEQ/CBQ/CMQ>.
- Internet World Stats. 2019. «World Internet Users Statistics and 2019 World Population Stats». Last accessed December 1. <https://www.internetworldstats.com/stats.htm>.
- Sutton, Kelsey. 2019. «Nearly 25% of U.S. Households Will Be Cord-Cutters by 2022, According to EMarketer». Last accessed January 2. <https://www.adweek.com/tv-video/nearly-25-of-us-households-will-be-cord-cutters-by-2022-according-to-emarketer/>.
- Koblin, John. 2019. «Netflix's Top 10 Original Movies and TV Shows, According to Netflix». The New York Times. <https://www.nytimes.com/2019/10/17/business/media/netflix-top-ten-movies-tv-shows.html>.
- Lambert, Lance. 2019. «Why Apple and Disney Are Serious Threats to Netflix Streaming Business». Last accessed December 22. <https://fortune.com/2019/10/31/apple-disney-netflix-streaming-analytics/>.
- Levenson, Josh. 2019. "Netflix vs. Hulu vs. Amazon Prime: Battle of the Streaming Giants." Last accessed December 22. <https://www.digitaltrends.com/home-theater/best-on-demand-streaming-services/>.
- MaFt.co.uk. 2019. "Latest Additions." New On Netflix USA. New On Netflix USA. Last accessed December 28. <https://usa.newonnetflix.info/>.
- Marvin, Rob. 2019. "The Most Important Buying Factors for Video-Streaming Services." Last accessed November 22. <https://www.pcmag.com/news/367487/the-most-important-buying-factors-for-video-streaming-servic>.
- Malone, Nathan. 2016. "Netflix's US Catalog Has 32% Fewer Titles than It Did in 2014 - Here's Why." Last accessed January 2. <https://www.businessinsider.my/netflixs-us-catalog-has-2500-fewer-titles-than-in-2014-2016-3/>.
- McCarthy, Niall & Richter, Felix. 2017. «Infographic: The Most Popular Original Streaming Shows». Last accessed December 30. <https://www.statista.com/chart/7526/the-most-popular-original-streaming-shows/>.
- McClure, Ben. 2019. "Understanding Corporate Profit Margins." Last accessed November 18. <https://www.investopedia.com/articles/fundamental/04/042804.asp>.
- McRitchie, James. 2018. "Netflix Approach to Governance: One-Sided." Last accessed November 29. <https://www.corpgov.net/2018/07/netflix-approach-to-governance-one-sided/>.
- Meadows, Austin. 2019. "Netflix Users Collectively Stream 164.8 Million Hours of Video Per Day." Last accessed November 29. <https://www.streamingobserver.com/netflix-users-stream-164-million-hours-per-day/>.

- Molla, Rani. 2018. «Here are some of the most popular shows on Netflix - which may be leaving Netflix soon». Last accessed November 29. <https://www.vox.com/2018/12/21/18139817/netflix-most-popular-shows-friends-office-greys-anatomy-parks-recreation-streaming-tv>.
- Moody, Rebecca. 2019. «Netflix Subscribers and Revenue by Country [2019 version]». Last accessed December 29. <https://www.comparitech.com/tv-streaming/netflix-subscribers/>.
- Nath, Trevir I. 2019. «Hulu vs. Netflix vs. Amazon Prime Video: What's the Difference?» Last accessed December 6. <https://www.investopedia.com/articles/personal-finance/121714/hulu-netflix-and-amazon-instant-video-comparison.asp>.
- Netflix Investors. 2019. «Netflix 10-k Report 2018.» Last accessed January 2. <https://www.netflixinvestor.com/financials/annual-reports-and-proxies/default.aspx>.
- Netflix Investors. 2019. «Shareholder Letter.» Last accessed January 2. https://s22.q4cdn.com/959853165/files/doc_financials/quarterly_reports/2019/q3/FINAL-Q3-19-Shareholder-Letter.pdf.
- Netflix. 2019. «Streaming Revenue and Membership Information by Region.» Last accessed December 20. <https://www.sec.gov/Archives/edgar/data/1065280/000106528019000441/a2019regionalreporting.htm>.
- Netflix Media Center. 2019. «About Netflix». Last accessed January 2. <https://media.netflix.com/en/about-netflix>.
- Nicolaou, Anna. 2019. «Apple splashes \$6bn on new shows in streaming wars». Last accessed January 2. <https://www.ft.com/content/4f7f4326-c2bf-11e9-a8e9-296ca66511c9>
- OECD. «Portugal - OECD.» Last accessed December 2. 2019. <https://www.oecd.org/portugal/>.
- Rennison, Joe. 2019. «Netflix changes the way TV production is paid for». Last accessed January 2. <https://www.ft.com/content/cf0f0bd6-4596-11e9-a965-23d669740bfb>.
- Research and Markets. Ltd, 2019. «The OTT video worldwide: trends and forecasts 2018–2023». Last accessed December 30. https://www.researchandmarkets.com/reports/4774097/the-ott-video-worldwide-trends-and-forecasts?utm_source=GNDIY&utm_medium=PressRelease&utm_code=rh743j&utm_campaign=1264284+-+OTT+Video+Worldwide:+Key+Market+Trends+&+Forecasts+Through+2018-2023&utm_exec=joca220prd.
- Riad, Nagwa & El Barasse, Wala'a. 2019. «IMF Annual Report 2019 Our Connected World». Last accessed January 2. <https://www.imf.org/external/pubs/ft/ar/2019/eng/assets/pdf/imf-annual-report-2019.pdf>.
- Rieck, Kathryn Roethel. 2019. «Netflix Has Unparalleled Customer Retention. Can Disney or Apple Shake It?». Second Measure. Last accessed September 30. <https://secondmeasure.com/datapoints/netflix-disney-plus-apple-customer-retention/>.
- Roser, Max; Ritchie, Hannah & Ortiz-Ospina, Esteban. 2019. «World Population Growth». Last accessed December 1. <https://ourworldindata.org/world-population-growth>.
- Schomer, Audrey. 2019. «US consumers view Netflix original content even more favorably than last year — here's why, and what it means for HBO.» Last accessed December 1. <https://www.businessinsider.com/us-consumers-think-netflix-has-best-original-programming-2019-5>
- Shevenock, Sarah. 2019. «49% Of Young Viewers Would Cancel Netflix If It Loses Disney, Marvel, 'Office,' 'Friends'.» Last accessed November 15. <https://morningconsult.com/2019/05/14/49-of-young-viewers-would-cancel-netflix-if-it-loses-office-friends-disney-marvel/>.
- Silverio, Ricca. 2019. «New Study Reveals the Average Online Video Subscriber in the U.S. Subscribes to 3.4 Streaming Services and Pays an Average of \$8.53 Per Service.» Last accessed December 20. <https://finance.yahoo.com/news/study-reveals-average-online-video-120000073.html>.
- Smith, Gerry. 2019. «Netflix CEO Vows to Spend Even More on Content». Last accessed December 19. <https://www.bloomberg.com/news/articles/2019-11-06/netflix-ceo-vows-to-spend-more-on-content-as-competition-grows>.
- Spangler, Todd. 2018. «Netflix Content Chief Says 85% of New Spending Is on Originals». Variety. <https://variety.com/2018/digital/news/netflix-original-spending-85-percent-1202809623/>.
- Spangler, Todd. 2018. «Netflix Adds Axel Springer CEO Mathias Döpfner to Board.» Last accessed November 11. <https://variety.com/2018/digital/news/netflix-adds-axel-springer-ceo-mathias-dopfner-to-board-1202946618/>
- Spangler, Todd. 2019. «Netflix to Raise Another \$2 Billion Through Debt to Fund Massive Content Spending». Last accessed December 13. <https://variety.com/2019/digital/news/netflix-debt-junk-bond-2-billion-content-spending-1203377007/>
- Spangler, Todd. 2019. «Will Disney Plus Shake Up How Consumers Value Streaming Services?» Last accessed December 14. <https://variety.com/2019/biz/news/streaming-service-consumer-study-disney-plus-1203322272/>.

- Sperling, Nicole. 2019. "HBO Max Out in May, Will Cost More Than Netflix." Last accessed January 1. <https://www.nytimes.com/2019/10/29/business/media/hbo-max-price.html>
- Technavio. 2019. "Global Digital Video Content Market 2019-2023." Last accessed December 24. <https://www.technavio.com/report/global-digital-video-content-market-industry-analysis>.
- Technavio. 2019. «Over the Top (OTT) Market by Content Type and Geography - Global Forecast & Analysis 2019-2023». Last accessed December 24. <https://www.technavio.com/report/over-the-top-ott-market-industry-analysis>.
- The Langston Co. 2019. "Consumer Behavior & Expectations In Today's Changing Media Landscape." Last accessed December 27. <https://thelangstonco.com/langston-streaming-study>.
- The Motion Picture Association of America, Inc. 2018. «A comprehensive analysis and survey of the theatrical and home entertainment market environment (THEME) for 2018». Last accessed December 31. <https://www.motionpictures.org/wp-content/uploads/2019/03/MPAA-THEME-Report-2018.pdf>.
- Vadehra, Pranav. 2018. «Big-3 SVOD Original Content Spending to Triple by 2022». Dig Last accessed December 20. <https://www.digitalstudiome.com/article-11513-big-3-svod-original-content-spending-to-triple-by-2022>.
- van Eeden, Ennèl & Chow, Wilson. «Perspectives from the Global Entertainment & Media Outlook 2019–2023». Last accessed December 20. <https://www.pwc.com/gx/en/entertainment-media/outlook-2019/entertainment-and-media-outlook-perspectives-2019-2023.pdf>.
- Watson, Amy. 2018. «Number of TV households worldwide 2010-2023, by platform». Last accessed December 28. <https://fesrvsd.fe.unl.pt:2099/statistics/324187/number-of-tv-households-platform/>.
- Watson, Amy. 2018. «Physical home video revenue worldwide from 2018 to 2022». Last accessed December 28. <https://fesrvsd.fe.unl.pt:2099/statistics/558423/home-video-revenue/>.
- Watson, Amy. 2019. «Amount of original content on Netflix 2018». Last accessed December 28. <https://www.statista.com/statistics/882490/netflix-original-content-hours/>.
- What's on Netflix. 2019. "Complete List of Netflix Originals." Last accessed December 12. <https://www.whats-on-netflix.com/originals/>.
- Worldometers. 2020. "Latin America and the Caribbean Population (LIVE)." Last accessed January 2. <https://www.worldometers.info/world-population/latin-america-and-the-caribbean-population/>.
- Yahoo! Finance. 2019 "Netflix, Inc. (NFLX) Stock Price, Quote, History & News." Last accessed January 2. <https://finance.yahoo.com/quote/NFLX?p=NFLX&.tsrc=fin-srch>.
- Yahoo! Finance. 2019. "Boasting A 21% Return On Equity, Is Netflix, Inc. (NASDAQ:NFLX) A Top Quality Stock?" Last accessed January 3. <https://finance.yahoo.com/news/boasting-21-return-equity-netflix-095339156.html>

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Netflix in Eastern and Asian Regions

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Abstract:

Netflix expansion to over 190 countries did not go easy on all international markets. In some places the company was met with strong domestic competition. One of these markets is Russia, where Netflix still has not got to the top 5 streaming leaders after 4 years of developing. Russian OTT market has been developing in the past years and today there are still a lot of opportunities for growth for domestic companies. However, it is not easy for a foreign company to enter the Russian market and become a leader.

Keywords: Over-the-Top (OTT), Subscription Video on Demand (SVoD), Advertising Video on Demand (AVoD), Subscriber

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Netflix in Eastern and Asian Regions

After Netflix performed its major expansion in 2016, the service also became available in the Russian-speaking part of the world. Russian citizens did not greet the streaming giant warmly, for one simple reason, more than 90% of the population of the country does not speak English languages. Besides, people are also used to a professional doubling of all of the foreign movies and tv-show. Netflix in 2016 had only subtitles for less than a half of its content.

OTT Market in Russia

Netflix entered Russian over-the-top (OTT) market in the stage of rapid growth. In 2015 its size was 38,5 million people, most of whom were not used to subscription video on demand (SVoD) model yet. The market mainly consisted out of 4 main players – ivi, Okko, and Megogo, Gazprom Media (later Amediateka) – all of them made revenues mostly from advertising-based video on demand model (AVoD)⁶, as most people were not willing to pay to watch content. However, this situation started to change very quickly, already in 2016 49% of sales (41% in 2015) came from subscriptions and not from advertisements, in 2018 this percentage rose up to 62%. (*Figure 1.*) Market leaders were actively developing and promoting SVoD model, also, a few more players joined the market in 2018 with the same revenue model. The size of the Russian OTT market increased to 47 million people, 3,5 of which use subscriptions. However, the majority still prefers to watch content for free with the advertisement (AVoD). In 2018 Russian OTT market was worth \$152,7 million, it is 45% more than the year before. It is forecasted to grow by 38% in 2019 and estimated to be worth \$564,5 million in 2023 with CAGR of 26%⁷. The market leaders have not changed since 2016, in 2018 ivi took 36%, Okko

5 Smith, Oliver. 2017. "Mapped: Where to Go If You Can't Be Bothered to Learn the Language." Last accessed December 27. <https://www.telegraph.co.uk/travel/maps-and-graphics/mapped-english-speaking-countries/>.

6 TMT Consulting. 2016. "Russian Market of OTT Services 2015." Last accessed January 2. <http://tmt-consulting.ru/wp-content/uploads/2016/06/TMT-рейтинг-OTT-видеосервисы-2015.pdf>.

7 TMT Consulting. 2019. "Russian Market of OTT-Videoservices Increased by 45%." Last accessed December 27. <https://www.cableman.ru/content/rossiiskii-rynok-ott-videoservisov-vyros-na-45>.

– 19%, Amediateka – 9%, Megogo – 9%, TVzavr – 6%, the remaining 21% were divided between newcomers and international players⁸. (*Figure 2.*) So where in here falls Netflix?

As mentioned before, when the company entered the Russian OTT market – it had a language barrier. Most shows that were on Netflix platform were already doubled by Russian companies and were shown on other streaming platforms that used aVoD model. Besides that, the choice of movies and tv-shows was quite small – less than 750 titles, when in the US at the same time the company had more than 5600 pieces of content. Comparing it to the libraries of Russian SVoD platforms – Netflix did not have any competitive advantage it entered the country in 2016.

The events of 2017 almost made Netflix leave Russia. In 2017 the Government issued a new law, that was supposed to help domestic video providers. According to it, a share of foreign capital in OTT Company could not be more than 20%. In the case when it is a fully international owned company, its subscription base in Russia has to be less than 50% of all of its subscribers, and only if the governmental commission approves it⁹¹⁰. Another law, issued in 2016, obligated Netflix to translate 80% of the content and produce at least 30% of its movies and tv-shows in Russia. As a result, it can be said that the company will neither become a leader nor be in the top 3 SVoD companies in this particular market.

Fail or Success after 4 years

Since 2016 Netflix has been slowly developing in Russia. The service did not leave the country in 2017, however, they were advised to get a Russian Business Partner. The platform is still only available in English and prices are shown in euros instead of rubles, which might be a difficulty for a non-English speaking user. Most movies and tv-shows are now doubled and

⁸ TMT Consulting. 2019. “Russian Market of OTT-Videoservices Increased by 45%.” Last accessed December 27. <https://www.cableman.ru/content/rossiiskii-rynok-ott-videoservisov-vyros-na-45>.

⁹ Kozlov, Vladimir. 2017. “Netflix Continues Operating in Russia Despite Foreign Ownership Restrictions.” Last accessed January 2. <https://www.hollywoodreporter.com/news/netflix-continues-operating-russia-foreign-ownership-restrictions-1015525>.

¹⁰ Webb, Isaac. 2017. “Netflix, Apple TV in a fix: Putin restricts streaming services in Russia.” Last accessed January 2. https://www.business-standard.com/article/international/netflix-apple-tv-in-a-fix-putin-restricts-streaming-services-in-russia-117050600241_1.html.

have subtitles. Netflix bought rights for 10 Russian tv-shows. One of them - “Better than Us” - has already premiered in August 2019 in 25 languages, and it became the first Russian Netflix Original show. However, “Better than Us”, which is fully in Russian language, is not available on Netflix Russia. Instead, it is being shown on another SVoD platform – Start.

According to Deloitte Russia, Netflix is only 6th streaming services where people go to watch paid content. The first five platforms include: ivi with 51% of people choosing it, Megogo and Amediateka – each has 28% of votes, Kinopoisk – 24%, and Okko with 22% of people using it. Only 19% of respondents voted for Netflix¹¹. This statistic number is very low for the company that is used to be a leader in each country it enters. So far the streaming giant was not very successful in the Russian market, although, the situation can change – there is a lot of space for the growth¹². With the population of around 146 million people, more than 60% of it are potential SVoD subscribers¹³.

Comparing Netflix’s performance in Russia to the one in Poland (population of Poland is almost 4 times smaller), it can be seen how slow the streaming giant is developing. In 2018, the company had roughly 1 million subscribers more in Poland than in Russia⁹. In November 2019 Netflix became a leading video-on-demand platform on the Polish market with over 3,7 million subscribers (86% growth from the previous year)¹⁴. At the same time, in Russia the company’s performance hardly can be called successful – it is estimated to have slightly over 1,1 million subscribers (28% growth from the previous year)¹⁵.

11 Elagina, Diana. 2019. “Most popular online video services for paid content in Russia 2019.” Last accessed December 28. <https://fesrvsd.fe.unl.pt:2099/statistics/1065631/russia-most-popular-online-video-services/>.

12 Dziadul, Chris. 2019. “Russian OTT Market Growth Continues.” *Broadband TV News*. Broadband. Last accessed December 28. <https://www.broadbandtvnews.com/2019/04/12/russian-ott-market-growth-continues-2/>.

13 PWC Report. 2019. “OTT Market.” Last accessed December 30. <https://www.pwc.ru/ru/publications/mediaindustriya-v-2019/rynok-ott-video.html>.

14 Statista Research Department. 2019. “Leading VOD websites in Poland in 2019, by real users.” Last accessed January 3. <https://fesrvsd.fe.unl.pt:2099/statistics/1040092/leading-vod-services-poland/>.

15 Moody, Rebecca. 2019. “Netflix subscribers and revenue by country.” Last accessed December 27. <https://www.comparitech.com/tv-streaming/netflix-subscribers/>.

Competition and Pricing¹⁶

One of the reasons why OTT industry is developing relatively slow in Russia – is low solvency of the population². Russian citizens are price sensitive, therefore, Netflix's choice not to adopt the price for the market played a big role. In Russia Netflix costs the same as in Europe from €8 to €12, depending on the plan. These prices are too high for people, considering the added value in terms of the amount of content. On the contrary, ivi – the most popular service in Russia - costs only €5,8 per month and gives access to 80000 titles, and it is also available on 5 devices. (*ivi.tv*, 2019) Netflix's Russian Library only gives access to slightly more than 1300 titles¹⁷. Another Netflix competitor in the Russian landscape is Amediateka. In 2017 Russian media service partnered with HBO and received exclusive rights for all of its content. Besides HBO Go shows, Amediateka gives its subscribers access to 4500 movies for €8,7. (*amediateka.ru*, 2019) This price also includes access to Yandex.Music, taxi discounts and other benefits. Megogo – service that is available in Russia and other Russian – speaking regions of Europe – costs just €5,7 and has 6000 titles in its library. The subscription also includes access to 50 TV- channels. (*megogo.net*, 2019) (*Figure 3.*)

Future of Netflix in Russia

Perspectives of Netflix in Russia are not that bright as it can seem. In case if the company does the wrong moves or will be a threat to domestic streaming, the Government can issue new protective laws. It could lead to Netflix leaving the country and losing all of its subscribers. In this case the company's value would decrease, as it is directly dependent on paid memberships. Another risk for the streaming giant is new sanctions from the U.S. (Netflix is not available in

¹⁶ All prices were converted with the exchange rate as of (3.01.2020): €1 = ₪69,3

¹⁷ Cabral, Jeremy. 2019. "List of TV Shows available on Netflix in Russia." Last accessed December 24. <https://www.finder.com/ru/netflix-tv-shows>.

Crimea, North Korea, and Syria due to U.S. government restrictions) which could lead to a streaming giant leaving the Russian market.

Russia vs. China

The Russian OTT market can be looked at as a simpler version of the Chinese OTT market. Both markets have strong domestic players. Prices are lower than the ones from Netflix. Chinese regulation is stricter and more protective of domestic companies. However, even in China's case Netflix has found a way to get to those desirable subscribers. The company spends more money on the production of Mandarin-language original content¹⁸, creating shows for the speakers leaving outside of the country (there are more than 50 million immigrants, according to the Chinese Government). In case the company has to leave Russia, it could use the same strategy for the Russian-speaking population, as there are in between 20 to 30 million people leaving outside of Russian Federation.

Appendix

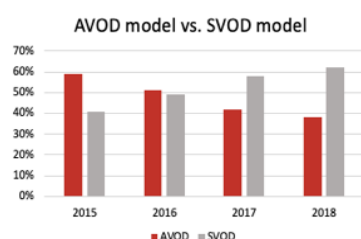


Figure 1. Share of AVoD vs. Share of SVoD in the market for Revenues, 2015 – 2018

Source: TMT Consulting

	Content	Price (in euros)
Netflix	1306	8 to 12
ivi	80000	5,8
Amediateka + HBO	4500	8,7
Okko	25000 - 35000	5,8 to 11,5
Megogo	6000 + 50 Tv Channels	5,7

Figure 3. Netflix Competitors on Russian Market

Source: ivi, Okko, Megogo, Amediateka

OTT Market Share in Russia in 2018

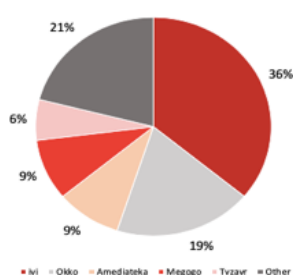


Figure 2. OTT Market Share in Russia, 2018

Source: TMT Consulting

¹⁸ Kharpal, Arjun. 2019. "Netflix has a China strategy — but it doesn't involve launching there soon." Last accessed January 2. <https://www.cnn.com/2019/05/10/netflix-has-a-china-strategy-it-doesnt-involve-launching-there-soon.html>.